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University of Scranton

College of Arts and Sciences
School of Management
Dexter Hanley College

1985/1986

UNIVERSITY OF SCRANTON
UNDERGRADUATE CALENDAR
1985-1986

FALL SEMESTER
1985

August 31-September 2	Freshman Orientation
September 3	Classes Begin
October 17	End of First Quarter
October 18	No Classes
November 22	Thanksgiving Holidays Begin After Last Class
December 3	Classes Resume
December 14	Study Day
December 15-21	Semester Exams
December 21	Christmas Recess Begins After Last Exam

INTERSESSION
JANUARY 1986

January 3	Classes Begin
January 28	Study Day
January 29	Final Examinations

SPRING SEMESTER
1986

February 3	Classes Begin
March 14	End of Third Quarter
March 21	Easter Holidays Begin After Last Class
April 1	Classes Resume
April 30	Frank O'Hara Day — No Classes
May 15	Study Day
May 16-22	Final Examinations
May 25	Commencement

SUMMER SCHOOL
1986

1st Session		*2nd Session*
June 2	Classes Begin	July 7
July 1	No Classes	August 6
July 2	Final Examinations	August 7

FALL 1986

August 30-September 1	Freshman Orientation
September 2	Classes Begin

University of Scranton
Scranton, PA 18510
(717) 961-7400

Day School Admissions Office (717) 961-7540
Hanley College Admissions Office (717) 961-7581
Office of Financial Aid (717) 961-7700

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University of Scranton

A Jesuit Coeducational Institution

1985/1986

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CAMPUS MAP ... Inside Rear Cover

what the university brings to the student

WHAT THE UNIVERSITY BRINGS TO THE STUDENT

In an era when higher education is characterized by public institutions often of 40,000 students or more, the University of Scranton is a private, independent liberal arts institution of 4,500 students.

At a time when students on many campuses are herded into the anonymity of 300-seat auditoriums and lecture halls, the largest classroom at the University of Scranton only exceptionally seats more than sixty persons. At Scranton the accent is on community and communication — not anonymity.

At a time when many private schools are experiencing a decline in enrollment, the undergraduate colleges at the University of Scranton have enjoyed a 120 percent growth in student enrollment over the last 14 years. It is one of the fastest growing private institutions in America.

At a moment when teaching in the multiversities has often been abandoned to graduate students, at the University of Scranton the faculty teaches. At Scranton, teaching, and great teaching at that, holds primacy.

But even more fundamentally, the crisis on American college campuses as in American society in recent years concerns the question of values. Students charge that American educational institutions have no values. The universities are silent — not only on the issues of the hour, but on the enduring issues as well.

Much of what follows in this bulletin attempts to convey by word and image that the University of Scranton does indeed possess its own values and to indicate to you what these values are. We prefer to fly our colors.

HERITAGE AND VALUES

The University is changing. In response to historical events and educational developments we are in the process of becoming a different institution from what we were last semester or last year. But every university, if it is to be great, must have a heritage to share with those who come to her.

The University, since its 1888 founding, has stood in the Catholic tradition, bringing to its students the educational heritage of the oldest continuous institution in the western world. From the 12th century ecclesiastical foundation of the universities of Paris and Oxford to the more recent establishment of the Catholic University of America (1887), this tradition continues in the University of Scranton.

Beyond this, the University stands in the Jesuit tradition, one of the youngest of 60 universities administered by the Jesuits throughout the world. From the establishment of the Gregorian University in Rome (1551), to the founding of Georgetown College in the Federal City at the time of the adoption of the Constitution (1789), to the coming of the Jesuits to the University of Scranton in 1942, this tradition has signified academic excellence and Christian humanism.

J.A. Panuska, S.J., Ph.D., President of the University

GOALS

1. The University of Scranton is a **Catholic, Jesuit** college in the **liberal** arts tradition, serving primarily undergraduate men and women. Its emphasis on undergraduate education does not preclude the establishment and encouragement of appropriate graduate programs so long as those programs are extensions of and congenial to the basic undergraduate commitment.

2. Historically, this Catholic University has served the population of the city of Scranton and its surrounding area. While retaining its basic commitment to the area in which it has roots, the University now includes in its declared purpose the intention of building and retaining, in addition to the flow of commuter students from the metropolitan area, an on-campus resident population of students from areas well beyond the city of Scranton, including areas well beyond the borders of the United States. Moreover the University does not intend to serve Roman Catholics in any exclusionary sense, but rather to provide Catholic education in a properly ecumenical sense for students from a variety of religious backgrounds and different value orientations.

3. **The University of Scranton is Catholic.** This means, first of all, that the University is committed to the person and gospel of Jesus Christ as the source of values and attitudes that should characterize the campus culture. The University is church-related and faith-committed. The Church to which it relates understands itself as a "people of God." The faith this University serves is in every instance a gift from God involving the act by which the human person entrusts himself or herself to the one God who calls each in a unique way and reveals Himself to all in an accessible way. Theology, as an intellectual effort to understand the data of divine revelation, is an academic discipline of first rank in a Catholic university. Theology here is done primarily in the Roman Catholic tradition. The University of Scranton stands in that tradition, communicates it in a systematic way, but explores as well other traditions for their intrinsic merit and for the contributions they can make to a better understanding of the Catholic tradition.

4. **The University of Scranton is Jesuit.** This means that the life of the University is inspirited with the vision contained in the Book of the Spiritual Exercises of St. Ignatius of Loyola, the founder (in 1540) of the Jesuit Order. This spirit is brought to the University not only by the Jesuits who live and work there, but also by their lay colleagues and students who may make their own this same vision through the personal experience of the Spiritual Exercises. Translated into an educational context, this vision manifests itself in a respect for the individual student as a unique person, an emphasis on service, on open communication, on freedom of choice, on openess to change, on freedom from inordinate attachments, on commitment to the value system contained in the Gospel of Christ. As Jesuit education grew, these characteristics manifested themselves in more measurable educational terms like clarity of thought, care for fundamentals, excellence in written and oral expression, reflection on personal experience, respect for the best in past human experience.

UNIVERSITY OF
SCRANTON

Mother Teresa and William Byron, S.J., President of the Catholic University of America, recipients of The University of Scranton's La Storta Medal for Human Service.

To be Jesuit today, the University community must include Jesuits who make their own the elements of Jesuit identity articulated by the delegates to the 32nd General Congregation of the Society of Jesus, the Order's highest legislative body, which met in Rome for three months ending in early 1975. The Congregation's Decree on "Jesuits Today" reads in part:". . .today the Jesuit is a man whose mission is to dedicate himself entirely to the service of faith and the promotion of justice, in a communion of life and work and sacrifice with the companions who have rallied round the same standard of the Cross and in fidelity to the Vicar of Christ, for the building up of a world at once more human and more divine" (No. 31). But Jesuit identity is served and preserved not by Jesuits alone. Jesuit-lay colleagueship broadens the basis of respect in this University Community for faith as a value and justice as a goal. Upon these characteristics rests the University's Jesuit identity.

5. **The University of Scranton is committed to liberal arts education.** This commitment is held in creative tension with the University's commitment to serve the practical or career-oriented expectations of its students and the needs of society for humanistically trained professionals.

It is our goal to blend with the liberal arts an appreciation of basic science. Similarly, it is our goal to provide a foundation in the humanities to all of our programs of scientific specialization.

Career-oriented course concentrations will, at this University in the College of Arts and Sciences, the School of Management and Dexter Hanley College, always be accompanied over the full course of undergraduate study by a general education curriculum which, in the judgment of the faculty, gives every student, regardless of major, an adequate exposure to the disciplines of the liberal arts. In line with the emphasis the University attaches to the liberal arts, attractive majors in these disciplines will be provided and special care will be had to foster excellence of teaching and library support for the liberal arts.

6. **The University of Scranton is committed to academic excellence.** The pursuit of this goal touches all elements of the life of the University, as outlined below; but first the University must express its understanding of the idea of excellence. Excellence is, in every instance, a relative term. To excel, is to move or stand apart from a well-defined starting point. Our pursuit of academic excellence begins with an understanding of where we are and what we propose to do.

a. **Students.** We begin with a respect for the varying capacity of the students, a characteristic Ignatius of Loyola insisted upon for his schools. The University will include in its student body no one who is incapable of serious academic work. But given that initial norm, the University wants heterogeneity in its student body with respect to race, sex, religion, socio-economic background, and academic potential. Moreover, the University intends, in the spirit of Christ, to do all it can to serve the poor. Excellence in the student body is measured in terms of development of academic potential, respecting in every case the unique characteristics and varying capacity of students.

b. **Faculty.** We begin with the acknowledgment that the quality of the University depends essentially on the quality of the faculty. We also propose to be primarily a teaching University, rather than a research center. The University takes the position that good teaching is enhanced by serious research and will not last without it. Hence, excellence in the University's faculty is measured in terms of continued advancement in the quality, effectiveness and vitality of classroom performance, as well as the continued application of faculty energy to research which, ordinarily, will lead to occasional publication for a scholarly or generally well-educated audience beyond the University community. We regard teaching and research as complementary, not in opposition or competition with each other.

c. **Administration.** The starting point from which administrators move to excel is manifold. It presupposes credentials appropriate for leadership and management in an educational environment, experience with the special problems of that environment, and knowledge of, as well as being known in, the academic community beyond the University. Excellence is then measured along lines of improved knowledge of the University as an institution and a community, service to the constituencies of the University, availability and responsiveness to the needs of the University community, management of financial and academic affairs, effectiveness of planning, decision-making and communication of plans and decisions to the University community, and impact in the realm of ideas and influence in the metropolitan area or beyond.

7. **The University of Scranton is committed to personalized education.** The student is at the center of everything the University does. Inspired by a Christian personalism, our governance, instruction, and all related services, especially counseling services and academic advising, respect the uniqueness of the individual. The individual is viewed, however, as a member of a campus community and of a larger human community. The educational approach of Christian personalism regards the individual as a person-in-community. Education at the University of Scranton aims to sensitize the student to his or her societal obligations as well as to his or her unique personal value, thus avoiding, it is to be hoped, a rugged individualism or a mindless

collectivism in the collegiate years and in later life. With total respect for an individual's freedom of choice and conscience, the University provides opportunities for worship and spiritual growth. Provision is also made for social development in a community environment informed by Catholic principles. The social and intellectual dimensions of the campus community are value oriented, designed to foster in every student principled judgments and actions that are free, responsible and humanly valid.

8. **The University of Scranton is committed,** as one of the dominant institutions in the civic community of Scranton, **to off-campus community service.** The primary service rendered by the University to the area is the education of future leaders for the area's professional, political, religious, cultural and business communities. Without interrupting or hindering this work, the University recognizes its capability and responsibility of rendering technical and cultural assistance on occasion to members of the communities enumerated immediately above. It also recognizes its responsibility to provide students, as students, with experience of the dominant social and economic problems of this region. This is in order to assist them in systematic analysis of the problems of contemporary life and motivate them to contribute in some way after graduation to the solution of these human problems.

The University, moreover, will encourage faculty research directed toward an enlargement of the region's understanding of its own problems.

Finally, the University will encourage and support members of its campus community to exercise their right to speak out as conscientious citizens against injustices which are perceived to be causing or exacerbating social problems in the civic community.

9. **The University acknowledges that being in the Jesuit tradition means being experimental and innovative.** The Jesuit belongs on the growing edge of Catholic life, interpreting the Church to the world and the world to the Church. It is in the Jesuit style to do, in education or any other work, what others cannot or choose not to do. The University therefore commits itself to the fostering of these Jesuit characteristics from its well-established institutional base. The educational apostolate under Jesuit auspices is instrumental; it is not an end in itself. The apostolate is a means for promoting the greater glory of God through the life of the minds of human persons. Accordingly, the Jesuit sees as the object of the educational task not only the intellect, but the will also, and indeed the total human person. The University of Scranton views its educational task in the same way.

10. **This Statement of Goals is intended to give direction to all that the University does.** Progress toward these goals will be measured first by the ability of each academic department and administrative unit to choose, and announce the choice of, specific objectives pertaining to each division of this Goals Statement. Second, progress toward our goals will be measured by the actual achievement of the stated objectives. The objectives, clearly stated, quantified and specified within a time frame, will be the means to the ends spelled out in this Statement.

THE CAMPUS

Since 1956, a development program has added 16 modern buildings including ten residence halls. Principal among these campus structures are:

ALUMNI MEMORIAL LIBRARY — opened in 1960, a striking presentation of advanced, functional architectural planning, (See photo page 16), this bright air-conditioned building contains 200,000 volumes and subscription service to 1,600 periodicals. Microfilm, microcard and microfiche collections numbering 30,000 items, a science reference room, and the offices of the University's semi-monthly national book review, *Best Sellers,* are located here.

SAINT THOMAS HALL — located in the center of campus, this building is named for St. Thomas Aquinas and provides a symbolic historic link between the modern University of Scranton and its predecessor, St. Thomas College. It contains many non-science classrooms, language and communication laboratories, the Computer Center, the University Chapel of St. Ignatius Loyola, offices for the Registrar, Treasurer, Dean of the College of Arts and Sciences, Admissions, Financial Aid, Provost/Academic Vice President, Graduate School, Dean of January and Summer Sessions.

THE GALLERY — a multi-purpose academic building named in honor of former President Eugene Gallery, S.J., houses Dexter Hanley College, a Media Resources Center with an audio-visual collection of more than 4,000 units, two large multi-media classrooms, the office of Career Services, the Counseling Center, a large quiet study area, and a fine arts gallery.

JOHN J. LONG CENTER — completed in 1968, and named for the former Jesuit President of the University, this three-level, multi-purpose structure has enabled the University to broaden its program of physical education. (See photo p. 13). It includes a 22,820 square foot main floor area used for basketball, or convocations with a seating capacity of 4,400. It provides specialized facilities for such activities as wrestling, weight lifting, handball, tennis, and golf, as well as a physical therapy room and sauna.

LOYOLA HALL OF SCIENCE — provides the highly specialized equipment necessary for the study of physics and electronics engineering, chemistry, and biology.

O'HARA HALL — Named in honor of Frank J. O'Hara who served the University for over half a century, this building on the corner of Jefferson and Linden Streets houses the School of Management, the departments of Nursing, Psychology, and Human Resources.

GUNSTER MEMORIAL STUDENT ACTIVITIES CENTER — facilities include faculty and student lounges, cafeteria and snack bar, bookstore, game room, and the 400-seat Eagen Auditorium used for cultural events and dramatic productions. The offices of the Vice-President for Student Affairs, Dean of Students, Campus Ministry, Student Government, and Commuter Affairs.

JEFFERSON HALL — houses both residence facilities and centers for special activities, the radio and television labs, a 300-seat auditorium, a swimming pool, and the Lawrence Mann reading room. Offices for the Departments of Physical Therapy, Communications, and Military Science, as well as for the *Windhover and Esprit* are located in this building.

ROCK HALL — this structure with its ecclesiastical architecture is located above the campus in the 400 block of Monroe Avenue. It houses Central Services and the offices of Safety and Security. It is named after the late Joseph A. Rock, S.J., professor of history and academic vice president emeritus. The Rock Lounge in Hafey Hall, a university residence, also honors Fr. Rock.

HILL HOUSE — named after the Rev. William B. Hill, S.J., Professor of English, this faculty residence is located at the eastern end of the campus on the corner of Webster and Linden Streets.

UNIVERSITY COMMONS — provides the University with a central campus environment. The Commons has a serpentine alignment with the area in front of the Gunster Memorial forming a focus for the campus. The area provides a major pedestrian link between Galvin Terrace, the University's outdoor sports center, the Gunster Memorial Student Activities Center, John Long Center, residence halls, and the heroic-sized sculpture of "Jacob and the Angel." Galvin Terrace, which was completed the summer of 1978, forms a pedestrian link from Mulberry Green to the Commons and the rest of campus.

CHAPMAN LAKE — the University's Conference and Retreat Center at Lakeside Pines provides 8 acres of recreation space only 20 minutes drive from campus in Montdale, Pa.

THE GRADUATE SCHOOL

A resource at hand to undergraduates is the University's Graduate School which offers the Master of Business Administration degree as well as Master of Arts or Master of Science degrees in Biochemistry, Chemistry, Counselor Education, Elementary and Secondary Education, Educational Administration, English, General Science, History, Physics, Solid State Electronics, Reading, Rehabilitation Counseling and Human Resources Administration.

A number of these departments offer accelerated programs which enable students to graduate with both the Bachelor and Master's degrees in five years or less. In addition, undergraduates with strong academic records and the permission of the appropriate deans are allowed to take courses in the Graduate School as part of their undergraduate program.

The Graduate School cooperates in the Master's Degree Program in Nursing offered by College Misericordia, Dallas, Pa.

CENTER FOR BOOK RESEARCH

The Center for Book Research was founded by the University in March of 1983 to "devote itself to examining the past, present and future role of the book in our culture." In creating the Center, the University was mindful of an urgent need, long recognized in the book field, for information on the creation, publication, and use of books in modern society. The Center engages in three categories of activity: publication of the journal *Book Research Quarterly*, public conferences, and sponsored research, including the production of the annual forecast of U.S. book sales *Book Industry Trends*.

RESIDENCE HALLS — designed to function according to small-group living principles, ten residence halls for out-of-town students are provided on the campus. They are centered about terraced quadrangles. A Jesuit counsellor lives in most halls and there is a resident assistant on each floor.

To meet the increasing enrollment of out-of-town students the University has constructed a new $4,000,000 dormitory of 200 beds. Opened in September 1985, this dormitory has been named Redington Hall to honor a generous benefactor, Francis E. Redington. The University has also recently acquired a series of houses and apartment buildings in the vicinity of campus and converted these to various types of student apartment-complexes. Some of these are organized about academic interests and most feature optional kitchen arrangements. Finally, students in the upper classes are permitted to live off campus in non-university owned apartments.

The standard plan for resident students includes living quarters, three meals on each class day, and brunch and dinner on weekends and mid-week holidays. The plan includes nursing service for emergency and short-term care in the infirmary. Further information is given in that section of the Bulletin which deals with expenses.

Westmoreland House.

A FACULTY WHICH TEACHES

If the University brings to the student a tradition and distinct values, its most important resource is its faculty. Over 200 faculty and administrators participate in the educational enterprise. They hold degrees from 135 different universities in 30 foreign countries on five continents. Cambridge and the University of London in England; Louvain and the Gregorian on the Continent; the University of Calcutta in India, the Sophia University in Japan, Soochow University in China; Berkeley, Harvard, Yale, MIT, Notre Dame and Georgetown in America — all are represented among the faculty.

By its nature and function, a university faculty constitutes the most cosmopolitan element in a community. Hindu and Muslim, Christian and Jew, ministers and rabbis, scholars, research scientists, and above all, teachers, are found on the University's faculty.

The Jesuit tradition is carried on at the University not only by the 25 Jesuits engaged in teaching or administration, but by the fact that almost half of the faculty hold at least one degree from a Jesuit college.

Many of the pictures which follow and the Faculty Directory at the conclusion of this Bulletin present more detailed information about the faculty.

Edward Gannon, S.J., Ph.D., University Professor.

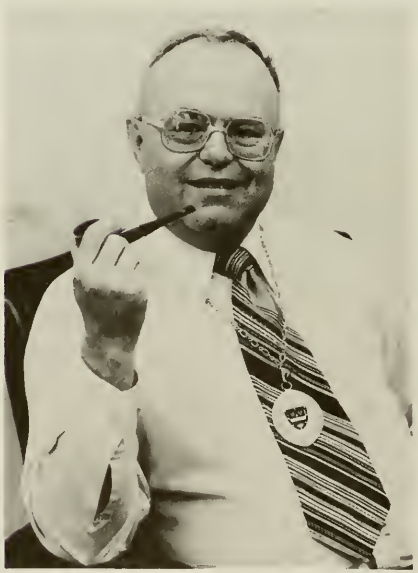
Joseph Hamernick, S.J.
Chairperson, Department of Communications

Richard Rousseau, S.J., S.T.D., Ph.D., Chairperson
Department of Theology.

Patrick Mohr, S.J., Ph.D., Specialist in Existentialist Philosophy; Editor of the Journal of Ultimate Reality and Meaning (Toronto).

Dr. Gary Mattingly, Assistant Professor of Anatomy, Dept. of Physical Therapy

Dr. Patricia Bailey, Department of Nursing



Professor Joseph Cannon, Director of the Counseling Center

Dr. John Carlson, Associate Professor of Philosophy; Associate Dean of the College of Arts and Sciences

Dr. Njegos Petrovic, Professor of Foreign Languages

Dr. Rebecca Beal, Assistant Professor of English; Specialist in Dante and Medieval English.

Within the city limits, Lake Scranton provides students and faculty a four-mile walking/jogging path around its shores.

THE SCRANTON ENVIRONMENT

The fifth largest city in the state, Scranton with a population of almost 90,000, is the principal city of Northeastern Pennsylvania. As a focal point of the interstate highway system, it is less than three hours by car from New York City and Philadelphia. The Pocono Mountains and Susquehanna River resorts with magnificent streams, lakes, and numerous ski slopes are only an hour away.

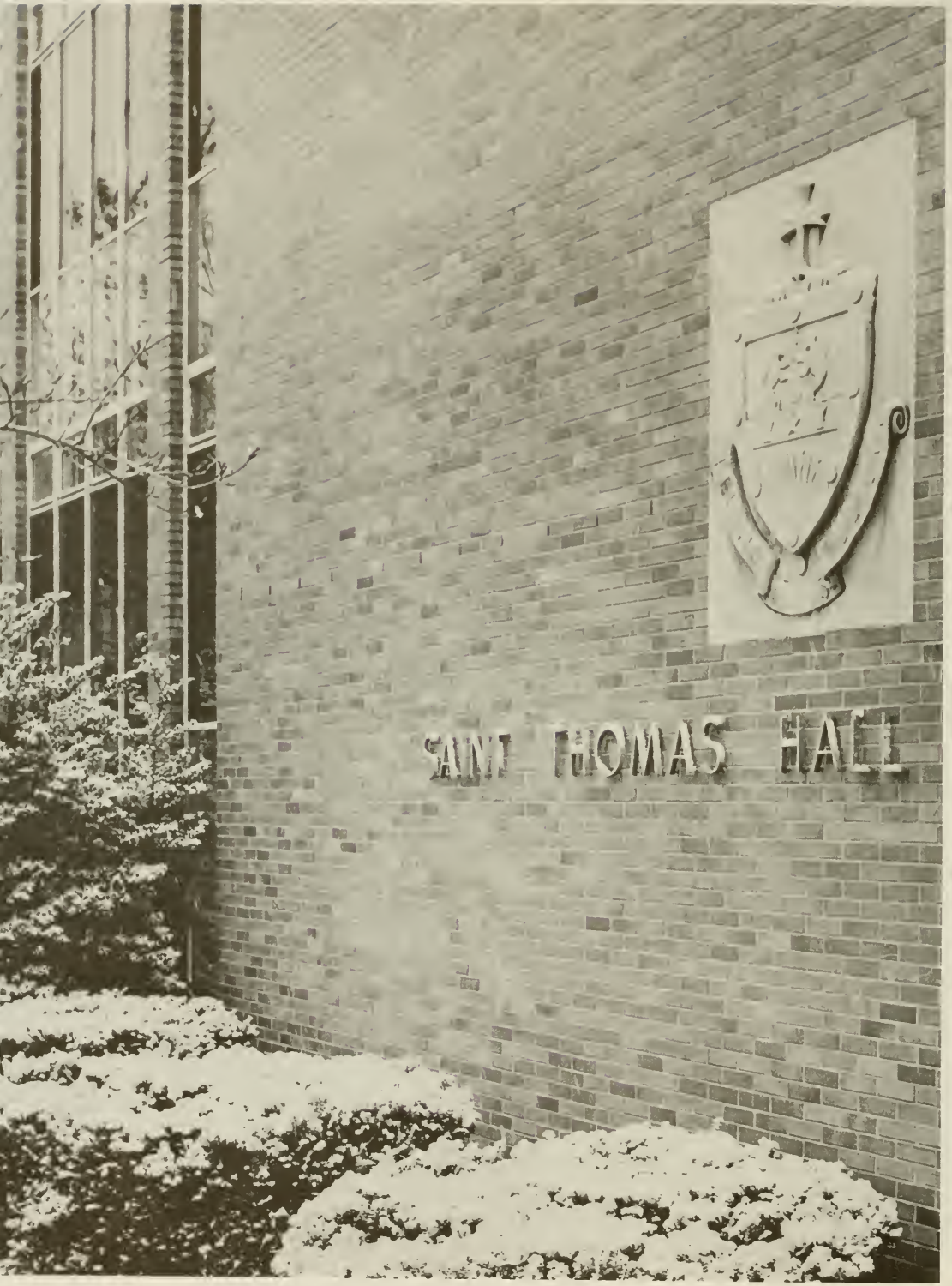
The city itself is a unique laboratory of the American urban tradition. Her industrial history dates from 1840 when the anthracite hot blast furnace was utilized for the first time in the iron industry. The manufacture of iron and steel gradually gave way to the more important anthracite mining industry, the city and entire Lackawanna Valley being underlaid with one of the richest hard coal deposits in the world. The mines served to attract immigrants from a multitude of nations, giving Scranton even today, sociologically and ethnically, one of the most diverse populations in America.

As the anthracite industry collapsed towards the end of World War II, Scranton was faced with challenges only later to be faced by many other American cities: almost total conversion to a new economic base of manufacturing, reclamation of the area from the environmental pollution of the anthracite era, and amid all this change, the preservation of its own identity.

The recent restoration of the century-old Lackawanna Iron and Steel Co. furnaces and the conversion of the historic Erie-Lackawanna train station to a Hilton Hotel just south of the University, the establishment of a National Coal and Recreation Park, the establishment of Steamtown U.S.A. as a primary tourist exhibit, the development of the ski slopes at Montage within the city limits, the Northeastern Philharmonic Orchestra under the direction of Hugh Wolff, Assistant Director of the Washington National Symphony, the continuing development of the local Everhart Museum, part of whose collection of 19th century American folk art represented the United States at Expo 70 in Japan and the Munich Olympics, are indicative of the city's uniqueness.

As the pages of the Bulletin illustrate, historically the University has been an integral part of the Scranton environment. The modernistic campus, built almost entirely in the last decade, overlooks the downtown area of the city. The historic nucleus of the campus is the Victorian mansion built in 1870 by Joseph Scranton, great-grandfather of William Scranton, former Governor of Pennsylvania and U.S. Ambassador to the United Nations. The mansion and estate grounds were given to the University by the Scranton family. Mrs. William Scranton recently concluded a term on the University's Board of Trustees. Her son, the Lieutenant Governor of the Commonwealth, William W. Scranton, is now on the Board.

As the city has served the University, so the University has served the city. Fully half of the area's doctors, dentists, lawyers, accountants, and male high school teachers are graduates of the University. Much of the business community responsible for the city's economic renewal received its training either at the bachelor's or master's level from the University. Members of the University faculty serve the region through research on the genetic effects of environmental pollution and soil reclamation of the culm waste deposits of the mines. In the advance from the technology of the anthracite hot blast furnace to our Digital VAX 11/780 computer, the University and the city have been partners.


SAINT THOMAS HALL

what the student brings to the university

WHAT THE STUDENT BRINGS TO THE UNIVERSITY

If the University changes, it is primarily the succeeding student generations which change it. A recent issue of the *Windhover,* the college yearbook, was dedicated by its editors to the "Committed Idealist," to those students who bring to the University community their active participation in its life and whose diversity and academic achievements add to the prestige of their alma mater.

DIVERSITY

As the faculty come from around the world, so do our students. Twenty-four states and 15 foreign countries are represented in the University's student body. In turn, through the Fulbright and Year Abroad program, University of Scranton students matriculate at such foreign universities as Louvain, Madrid, Tubingen, Mainz, Oslo, Fribourg, Cologne, Berne, Strasbourg, the Sorbonne, and University College, Dublin. This interchange of students contributes to the diversity and intellectual life of the University.

It is a source of pride to the University of Scranton that a diversity of political and social views flourishes among our students. In the continuing political turmoil of recent years which shut down many universities and brought violence to others, it was the determination of her students and faculty that the doors of this University should remain open, its classes held, that all opinions should be heard and orderly processes followed in the resolution of our problems.

PARTICIPATION

Much of the work in a university community is accomplished through student input. Much of the scientific research at the University is done by undergraduate students in the laboratories and in the field. The University newspaper and yearbook are edited and managed by students. Frequently students publish reviews in *Best Sellers* and, with faculty assistance, in other national scholarly journals. Students work in the public relations and admissions offices, computer center, as resident assistants in the dormitories, as research assistants and interns for deans and registrars.

Similarly, they participate in the University's decision making. Seven students are elected by the student body to serve on the University Senate. Others serve with departmental chairmen and faculty on the Conference which recommends to the Dean changes in the academic program of the college. They form a majority on the Student Affairs Council which prepares legislation for the president's review. Students also serve with other members of the University community on the various Search Committees which recommend candidates for the principal administrative posts from President to Dean.

Karen Pennington, '76,
Associate Dean of Students

Miss Caroline Bennett, '83 (computer science),
Trustee of the University of Scranton.

ACHIEVEMENT

The Jesuit educational tradition has produced men as diverse as Charles DeGaulle, James Joyce, Teilhard de Chardin, Pope Paul VI, Doctor Tom Dooley, Prime Minister Trudeau of Canada, film maker Alfred Hitchcock, coach Vince Lombardi — to name but a few of over 2,000,000 alumni. Seventeen thousand of these alumni have graduated from the University of Scranton. These, too, have achieved:

Patrick Cardinal O'Boyle ('16, classics), Archbishop of Washington; Dr. Clarence Walton ('37, history), first lay president of the Catholic University of America; Dr. Glynn Lunney ('55, pre-engineering), Chief of the Flight Director's Office for the National Aeronautics and Space Administration, lead flight director for historic moon flights of Apollo 11 through 15; Jason Miller ('61, English), winner of the 1973 Pulitzer Prize in Drama for *That Championship Season* and "Oscar" nominee for his role in *The Exorcist*.

BACCALAUREATE SOURCE OF PhD's

Achievement is recognized in the recent study of the office of institutional research at Franklin and Marshall College which shows that over the last 60 years (1920-80), the University of Scranton ranked 91st out of 867 four-year, private, primarily undergraduate institutions as the baccalaureate source of PhD's in all fields. This report was followed up in a study of Prof. Alfred E. Hall, College of Wooster (*Change* Magazine, April 1984), which analyzed the same data but took into account the relative size of the institutions as measured by number in graduating classes. The Wooster study resulted in the University of Scranton ranking 80th out of 867 colleges in terms of the percentage of graduating seniors between 1920 and 1980 who went on to earn a PhD.

The similarly excellent record of Scranton students in the pursuit of law and medical degrees is documented elsewhere in this Bulletin in the pre-law and pre-medical sections.

NATIONAL FELLOWSHIP AWARDS: FULBRIGHT PROGRAM

Achievement is recognized too in the number of prestigious national fellowships awarded to graduates of the College in recent years. In the last 15 years, 49 students have been awarded international fellowships in the competition administered by the Institute of International Education. Other seniors have been awarded fellowships from the National Science Foundation, the Danforth Foundation, the Harry S. Truman Memorial Foundation, the International Rotary, the International Telephone and Telegraph Corporation, and the Mellon Foundation.

During 1983-84, these University of Scranton students held national and international fellowship awards: Christopher Wahren won a Mellon Fellowship in the Humanities and a German Academic Exchange Fellowship (DAAD) to the University of Bonn; Erin Brennan won a Fulbright to the Federal Republic of Germany at the University of Trier; Joseph Tuncavage (chemistry) won a Swiss University fellowship to the University of Basle; Peter Regeski (history and French) won a French Government fellowship to Tours, France. Finally, Patrick Davies (Spanish and criminal justice) became the third University of Scranton student in three years to win one of the 25 ITT fellowships. Only Harvard College and Yale College have done as well. Mr. Davies was in Chile.

Collette Mazzucelli, '84
Swiss University Fellowship to Fribourg
(History and Philosophy)

Kathleen Flanagan, '81
French Government Fellow to Arles
(Education and French)

Maria Mascaro, '86
Truman Scholar from Pennsylvania
(Accounting)

Robert Conforti, '84
Swiss University Fellow to Zurich
(Chemistry and Biochemistry)

Bernadine Brennan, '82
ITT Fellow to Finland
(Biology)

Patrick Davies, '83
ITT Fellow to Chile
(Criminal Justice and Spanish)

Christopher Wahren, '83
Mellon Fellow in the Humanities
(Philosophy, German, Mathematics)

Erin Brennan, '83
Fulbright Fellow to Germany
(History & German)

Carmen Giunta, '82
National Science Foundation Fellow
(Chemistry)

In the 1984-85 academic year, these University of Scranton students won national and international fellowships: Kathleen Flanagan (education and French) won a French Government Grant to Arles. Colette Mazzucelli (history and philosophy) won a Swiss University fellowship to Fribourg. Robert Conforti (chemistry and biochemistry) was awarded a Swiss University grant to the Federal Institute of Technology in Zurich. Finally, Maria Mascaro (accounting) won one of the 105 congressionally-funded Harry S. Truman Memorial Scholarships in the nation; she is one of three Pennsylvania scholars.

During 1985-86, four College of Arts and Sciences graduates hold fellowships awarded through the Institute of International Education: John Baltrami, a double major in biology and French, holds a Swiss University fellowship at the University of Fribourg; Michele Gieger, a double major in communications and German, won a Fulbright to the University of Bonn in Germany; Marguerite Pedley, a double major in biology and psychology, is on a Fulbright in New Zealand; and Louise Vogel, a double major in International Studies and German, holds a Fulbright at the University of Hamburg in Germany.

John Beltrami

Louise Vogel

Michele Gieger

Marguerite Pedley

International Fellowship Winners for 1985-86.

In recognition of Senator J. William Fulbright's contribution to the Fulbright Fellowship Program, the University of Scranton on May 29, 1983 awarded him an honorary degree. The citation read in part:

> As an institution whose students and faculty have shared richly in the vision of the Fulbright Act, it is fitting that the President and Trustees commend to our own students the value of international education and, more especially, Senator Fulbright's example in sharing the benefits of that experience with others.

In reply, Senator Fulbright said:

> I wish to congratulate the students, the faculty and the administrators of the University of Scranton. It is an impressive achievement that for 14 consecutive years your students have won Fulbright fellowships. It is an impressive achievement that 40 of your students have won fellowships for study abroad in a dozen countries during these 14 years. It is an impressive achievement that a half dozen of your faculty have won Fulbright fellowships as senior lecturers and researchers in such countries as Australia, Germany, Indonesia, Korea, Italy, and Taiwan, and that one of your faculty came to the United States originally as a Fulbright Scholar.
>
> It is my conviction that from these experiences international understanding will be increased; that the cause of both scholarship and world peace will be served; that this University will be a better institution because of the impact of the exchange program; and that these Fulbrighters will be better people because of the impact of their year abroad.

The 3900 undergraduate students enrolled in the College of Arts and Sciences, the School of Management, and the Dexter Hanley College are a distinguished part of the half-million students now enrolled in Jesuit educational institutions around the world.

A DECADE OF ACHIEVEMENT:
COLLEGE OF ARTS AND SCIENCES
AWARDS FROM INSTITUTE OF INTERNATIONAL EDUCATION
FULBRIGHT PROGRAM AND INTERNATIONAL ROTARY, 1976-85

1976	Grace Hosie	Germany
	Laurence Orzell	Poland
1977	Thomas Bonhage	Germany
1978	Paula Dzwonczyk Betancourt	Germany
	Philip Horner	Switzerland
1979	Mark Bender	Rumania
	Louis Furiosi	France
	Dennis Hagemann	Germany
	Christine Piatek	Poland
1980	Veronica Cardiff	Germany
	Stephen Carlin	Chile
	Michael Corbley	Switzerland
	Maryann L. Heckman	Uruguay
	Helen Hricko Haney	Germany
1981	Patrick Cumberland	Uruguay
	Arlene Drack (ITT)	Norway
	Deborah Krzywiec	Germany
	Irene Mlodzinski	Switzerland
	Mark Wisniewski	Switzerland
	Brian Wynne	Germany
1982	Michael Kondracki	Peru
	Bernadine Brennan-Moglia (ITT)	Finland
	Kathleen Flanagan	Belgium
	Joseph Piccirilli	Germany
	Howard Sorensen	Uruguay
	Elizabeth Veca	Switzerland
	Leon Xavier Zawacki	Germany
1983	Erin Brennan	Germany
	Patrick Davies (ITT)	Chile
	Peter Regeski	France
	Joseph Tuncavage	Switzerland
	Christopher Wahren	Germany
1984	Robert Conforti	Switzerland
	Kathleen Flanagan	France
	Colette Mazzucelli	Switzerland
1985	John Beltrami	Switzerland
	Michele Gieger	Germany
	Marguerite Pedley	New Zealand
	Louise Vogel	Germany

THE ACADEMIC PROGRAM

ACADEMIC PROGRAM

DEGREE PROGRAMS

The University offers the following degree programs for the undergraduate student:

BACHELOR OF ARTS

- Classical Languages
- Communications
- Communications/English*
- English
- French
- German
- History
- Interdisciplinary Studies
- Modern Languages
- Philosophy
- Spanish
- Theology and Religious Studies

BACHELOR OF SCIENCE

- Accounting
- Biochemistry
- Biology
- Biophysics
- Chemistry
- Chemistry-Business
- Computer Science
- Criminal Justice
- Economics/Finance
- Education
- Electronics Engineering
- Electronics-Business
- Family Studies
- Food Science and Nutritional Chemistry
- Gerontology
- Health and Human Services
- Health/Human Services Administration
- International Studies
- Liberal Studies*
- Management
- Marketing
- Mathematics
- Medical Technology
- Nursing
- Physical Therapy
- Physics
- Political Science
- Psychology
- Public Administration and Public Affairs
- Sociology

ASSOCIATE IN ARTS*
ASSOCIATE IN SCIENCE*

- Computer Science
- Criminal Justice
- Health/Human Services
- Political Science
- Public Administration
- Social Relations/Gerontology

THE SCRANTON PLAN

The product of a two-year study by a faculty-student-administration committee, the Scranton Plan seeks traditional Jesuit university educational objectives in the era of the knowledge explosion. In departing from a core curriculum of specifically required subjects, it acknowledges that there are today many more requirements for a liberally educated person than was formerly the case: disciplines, especially in the natural and social sciences, not known a century ago; foreign cultures thought insignificant only fifty years ago.

The New Curriculum, in seeking to equip undergraduates with the ability to effectively communicate their knowledge, takes note that there are today many more ways to communicate than in the past. Computer science and other quantitative languages, applied fine arts as aesthetic languages, writing and oral communication laboratories may develop the ability to communicate with others and carry on the University's traditional emphasis on rhetoric as cogently as the study of Latin and Greek in the past, or even the study of modern foreign languages in today's world of

*Available through Dexter Hanley College only.

intensified international relations. Different students will have different communication interests and it is a virtue of the new curriculum that its flexibility can accommodate and utilize that interest.

Finally, the Scranton Plan takes note that contemporary students have criticized the absence of study of values on American university campuses, the failure of the universities to deal with philosophies of life which provide the means to evaluate the norms of national and personal actions. The new Scranton curriculum provides a significant place for the study of philosophy, the theological tradition of the student, and comparative religions. This too continues a traditional emphasis in the University's educational pattern but allows the student flexibility in choosing to meet third and fourth year general education requirements, either through theology or philosophy, in opening up more opportunities for the study of human values through related courses in psychology, sociology, environmental sciences, etc., and in making it more feasible to carry a double major in theology or philosophy along with the student's regular major.

CURRICULAR OUTLINE

Major Field of Concentration . . . . . .36 credits
Cognates Related to Major. . . . . .24 credits
General Education . . . . . .67 credits

Major: 36 credits in the major field of concentration is the normal amount. Some departments require less, the minimum being 30 hours with the unallocated credits going into the other curricular areas. Several departments, especially in the physical science area, require more than 36 hours, the additional credits coming from the cognate area and/or as overloads beyond the normal 127 credits needed for graduation. The specific departmental curricular models on subsequent pages of the Bulletin should be consulted. Students desiring to shape an **interdisciplinary major** should consult their Academic Dean on their program.

Cognate: These are courses external to the major field of concentration (a minor), but which round out the student's competence in his major through the study of related disciplines and subject mater, or the acquisition of skills useful to his or her specific vocational goals. Normally the cognate area will consist of 24 credit hours, some of which may be specified by the department and others chosen by the student according to his or her particular interests or objectives.

General Education: Shunning a merely technical or pre-professional education, the majority (67) of the student's 127 credits toward the degree are devoted to a broad liberal education according to the following typical pattern.

A. **Physical Education** — Four one-credit courses in the freshman and sophomore years . . . . . 4 credits

B. **Distribution of remaining credits into broad areas of knowledge as indicated in the table** . . . . . 63 credits

In some instances, departmental recommendations are made with respect to the general education courses; departmental curricular models should be consulted. In

fulfilling the distribution requirement, students ought ordinarily to complete at least five two-course sequences to provide depth as well as breadth in their general education.

C. **Interdisciplinary Courses**— These one semester courses are taught by professors from at least two different departments. Their purpose is to demonstrate the inter-relatedness of various fields of knowledge and the necessity to synthesize. One such course is to be taken in junior or senior year.

D. **Communication Skills**—Unlike many college curricula, the new Scranton curriculum does not require specific courses in English grammar. Rather, because of its recognition that writing and speaking effectively are skills necessary for success in college and in one's later professional life, the University of Scranton requires that students must demonstrate basic competencies in written and oral communication before their junior year. Each of these competencies may be demonstrated by the students in one of the following ways:

1. Competence indicated by the high school data submitted for admission: academic achievement or extracurricular success in these areas.
2. An examination supervised by Communication Center faculty
3. Certification by a professor that the student's class papers or oral presentations clearly demonstrate each competence.
4. Successful completion (a grade of C or higher) of courses set up to facilitate mastery of these skills: Communications 2 for oral communication; English 7 for writing skills.

E. **Non-Classroom Activities** — With the approval of the Academic Dean and the department, the student is encouraged to petition beforehand that certain non-classroom activities such as travel abroad, internships, participation in artistic productions, sustained activity in political, social, or religious organizations, etc. be supervised, evaluated, and accepted for academic credit — normally in the Free Area of the General Education distribution.

DOUBLE MAJOR PROGRAM

Students at the end of the first semester of freshman year or thereafter may elect to pursue a second field of concentration in addition to their first major. The permission of the appropriate Dean and the agreement of the two pertinent departmental chairmen should be obtained in writing at this time and placed in the student's file. The student is responsible for all major and required cognate courses. The 67 credits in the General Education area need not, of course, be repeated. The Registrar's office will add the notation of the second major to the student's transcript in the first month of the student's senior year by which time he/she should have registered for all the courses required in the double major program. Seventy students in the class of '85 graduated with double majors. Philosophy was the most favored (27 students), with biology, marketing, English, history, computer science, management, finance, communications, rehabilitation counseling, human services administration, psychology, theology and foreign languages also prominently represented.

MINORS

Beginning with the '85-'86 academic year students can qualify for minors in certain disciplines. The minimum University requirement is 15 hours in the field. Consult individual departmental listings, after their major curriculum tables, for detailed information.

DISTRIBUTION TABLE

General Education Areas	MAJOR FIELDS OF CONCENTRATION					
	Nat. Sci. Math Psych. Comp. Sci. Nursing‡	*Human Services Sociology† Pol. Science Criminal Justice*	*English History Modern Language*	*Philosophy Theology*	*Communi-cations*	*Accounting Economics Marketing Manage-ment*
	a	b	c	d	e	f
I. *Natural Science & Quantitative Studies* (Natural Sciences, Math., Adv. Experimental Psych., Adv. Computer Sci., Statistics)	—	9	9	9	9	9
II. *Social and Behavioral Sciences* (Sociology, Economics, Pol. Sci., Psychology 23, 25, 26, 147, M.S. 101, Education)	12	—	12	12	6	6
III. *Communications* (Speech, Writing, Elementary and Intermediate Languages, Applied Fine Arts, CMPS 20, 21, 25) See also Page 70.	9	9	9	9	—	9
IV. *Humanities* (History, English and Foreign Literature, Advanced Language, Art History)	18	18	6	18	18	18
V. *Philosophy and Theology* Philosophy Theo./Religious Studies	6 (6)* 6	6 (6)* 6	6 (6)* 6	6 or (6)* 6	6 (6)* 6	6 (6)* 6
Free Area	6	9	9	9	12	3
			CREDITS			

‡Nursing requires only 9 credits in AREA II and 6 credits in AREA III

†Sociology allows 12 credits in Free Area.

*Area V requires 6 credits in Theology (including T.RS 21), 6 credits in Philosophy (Phil. 20 and Phil. 110), and 6 more in either field

SPECIAL PROGRAMS

THREE-YEAR BACHELOR'S DEGREE PROGRAM

The University of Scranton's Curriculum and 4-1-4 calendar allow qualified students to attain their bachelor's degree within three years — thus considerably reducing the overall cost of their undergraduate education and allowing the student to enter the market place or begin graduate and professional studies a year earlier. While Advanced Placement or College Level Examination Program credits (see Index) are very useful for this, a student who does not bring these from high school may still complete the degree program in most majors within three years through the use of January Intersession courses and/or Summer School sessions. This presumes that at a minimum, normal academic progress is being made. Typically two Summer Schools (12 credits each) and two or three January Intersessions will suffice. Especially qualified students may be allowed overloads from the appropriate Dean to further reduce this — as will Advanced Placement credits. The Dean should be contacted as early as possible in a student's career in order to facilitate the needed scheduling. Entering freshman students may want to use the Summer School immediately following their high school graduation to further this three-year program; the Dean of Admissions should be consulted with respect to this. Details on the special Scranton Prep-University Seven year (4-3) high school-college degree program are available from the Dean of Studies at Scranton Prep.

FIVE-YEAR BACHELOR-MASTER'S DEGREE PROGRAM

This program enables University undergraduates to complete both the bachelor's and master's degree program within five years in the fields of English, Business, Chemistry, Biochemistry, Human Services, and Physics. Students elect to enter the program after sophomore year. Ordinarily two summers of study or equivalent January intersessions are needed.

FOUR-YEAR BACHELOR-MASTER'S DEGREE PROGRAM

Qualified undergraduates in the departments of history and chemistry have the option of pursuing a four-year program leading to simultaneous conferral of bachelor and master's degrees in history, chemistry or biochemistry. Summer work and the use of 12-13 graduate credits in place of undergraduate courses are involved. The departmental chairperson should be consulted for details.

YEAR ABROAD PROGRAM

Students with above average (3.0 QPI) academic records are encouraged to participate in the University's Year Abroad Program. This ordinarily takes place in junior year but with permission may also take place in sophomore or senior year.

The University of Scranton is affiliated with the Loyola-Rome Center and other Jesuit-sponsored programs abroad. It also participates in the International Student Exchange (ISEP). During the past and present years University students have enrolled in the Loyola-Rome Center, Marquette and Saint Louis University programs in Spain, University College in Cork and Trinity College in Dublin, Beaver College programs in London, the University of Göttingen, and the University of Salzburg. One of our students is currently an ISEP exchange student in Besancon, France. Interested students should contact Dr. John Carlson, the Associate Dean of the College of Arts and Sciences, for detailed information.

HONORS PROGRAM

The Honors Program provides selected students with greater depth and breadth in their education through seminars and directed independent work. Participants in the program take interdisciplinary courses and seminars as well as tutorials both in and out of their major field. They also complete and defend a project in their major.

Honors courses are designed to intensify the general education requirements. Offerings have included such courses as Victorian Studies, Science and Society, and The Rise of Scientific Thinking. One course is required of each Honors student.

An Honors Tutorial is an exploration of a topic on an individually directed basis. The student meets with a mentor weekly throughout the semester. Three tutorials are required of each Honors Student — at least one in and one outside the major. A fourth tutorial may be taken if the student desires. These tutorials count toward major, cognate, or general education requirements.

In the Honors Seminars a small group of Honors Students meets once a week with the Director and Assistant Director. The Junior Seminar is based on an interdisciplinary reading list; the Senior Seminar is based on the Senior Honors Projects. Since these seminars are over and above ordinary graduation requirements, there is no tuition charge for them.

The Senior Honors Project involves an intensive exploration of a specialized topic. It can be either academic or professional in nature. The student defends the finished project before a board of three faculty members who judge whether it is of Honors caliber.

Dr. Ellen Casey, Director of the Honors Program

ADMISSION

Applications are accepted every fall from those students who have at least eighteen hours of college credit and who expect to graduate after three more years of work at the University. Applicants must ordinarily have at least a 3.3 QPI; a minimum of a 3.5 QPI (cum laude) is required for graduation in the Program. The number of spaces in the program is limited, and acceptance is based on the applicant's high school and college records, SAT scores, recommendations, application, and interviews. For further information contact Dr. Ellen Casey, Director of the Honors Program.

SCHEDULE

	Fall	Spring
Sophomore Year:	Application	Honors Course (3 credits)
Junior Year:	1 or 2 tutorials (3 credits each)	1 or 2 tutorials (3 credits each) Junior Seminar (2 credits toward Honors graduation)
Senior Year:	Honors Project (1 credit) Senior Seminar (1 credit toward Honors graduation)	Honors Project (2 or 5 credits, dependent on program) Defense of Project

SPECIAL JESUIT LIBERAL ARTS CURRICULUM

This specification of the credits available to all students in the College's General Education program is intended to follow more closely the traditional Jesuit liberal arts core curriculum while still adapting itself to contemporary intellectual and social developments. This distribution pattern emphasizes:

1. The transmission of the western classical heritage and the Christian humanist culture to the contemporary student through literature, history, philosophy and theology.

2. An ability to undertake logical, systematic, and critical reflection on a given intellectual problem and to apply one's conclusions to the contemporary situation.

3. An understanding of and sensitivity towards the contemporary problems of equality and individual freedom, of economic, social and political justice.

4. An outstanding ability to communicate or what Jesuits historically have referred to as "eloquentia perfecta." This aims not merely at competence but mastery of writing and speaking skills with the goal of persuasion and full communication of one's ideas. Students are strongly urged as part of this program to join the College's drama group, the debate squad and to write for the *Aquinas*, the college newspaper, *Esprit*, the literary quarterly, or the book review journal, *Best Sellers*.

Every other year, during the month of January, the SJLA students participate in an academic program held in a European center. In 1983, Vienna was the site; in 1985, Florence was the site. Questions on the Jesuit Liberal Arts Curriculum should be addressed to its Director, Rev. Edward Gannon, S.J.

Dept. & No.	Fall Semester	Spring Semester		Credits
		FRESHMAN		
MAJOR	MAJOR	MAJOR	4/3	4/3
COGNATE	COGNATE	COGNATE	4½/3	4½/3
Psych. 23-Cmps. 1*	Introduction to Psychology*	Computer Literacy*	3	3
Phil. 20-104	Introduction to Philosophy	Epistemology	3	3
T/RS 21-Comm. 111	Introduction to Theology	Advanced Composition	3	3
Ph.Ed. 1-2	Basic Physical Education	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	MAJOR	MAJOR	4½/3	4½/3
COGNATE	COGNATE	COGNATE	4/3	4/3
COGNATE	COGNATE	COGNATE	4/3	4/3
Phil. 112-Econ. 10	Logical/Rhetorical Analysis	Essentials of Economic Theory	3	3
Phil. 108-Hist. 102	Metaphysics	Ancient History II	3	3
Ph.Ed. 23-24	Advanced Physical Educ.	Advanced Physical Educ.	1	1
			16	16
		JUNIOR		
MAJOR	MAJOR	MAJOR	4½/3	4½/3
MAJOR/COGNATE	MAJOR/COGNATE	MAJOR/COGNATE	4/3	4/3
COGNATE	COGNATE	COGNATE	3	3
T/RS 153-Phil. 159	Great Books I	Great Books II	3	3
Hum. 151-152	Masterworks I	Masterworks II	3	3
Phil. 110-122	Ethics	Modern Philosophy II	3	3
			18	18
		SENIOR		
MAJOR	MAJOR	MAJOR	3	3
MAJOR	MAJOR	MAJOR	3	3
Hist. 3-4	European History 1500-1815	European History 1815-Present	3	3
Phil. and Engl. Elec.	Contemporary Phil. Elec.	English Literature Elective	3	3
T/RS 146-165	Jesus the Christ	Moral Theology	3	3
			15	15

TOTAL: 140-130 credits
Depending on major

*Intermediate or Advanced Modern Language may be substituted and is highly recommended.

ASSOCIATION OF JESUIT COLLEGES

A variant of the Year Abroad is the University's program in conjunction with the 28 Jesuit universities in America by which above-average (3.0 QPI) students may spend one or two semesters of the their junior year at another Jesuit institution. These institutions are listed on page 239. During 1985-86 University of Scranton students are attending Boston College, Loyola University in New Orleans, Santa Clara University, and the University of San Francisco. Consult Dr. John Carlson, the Associate Dean of the College of Arts & Sciences, for details on this program.

COOPERATIVE PROGRAM WITH MARYWOOD COLLEGE

The University's cooperative arrangement with Marywood College — less than two miles away and the largest women's college in America — makes available to University students additional individual courses.

INTERNSHIP PROGRAMS

The University's commitment to internships as an integral part of the educational process is strong and growing. In 1985-86, almost 250 students in the College of Arts and Sciences are engaged in internships carrying academic credit related to their major or vocational goals. 165 of these are seniors — one-third of the class — in twelve different majors.

Medical Technology majors spent their senior year in eleven different hospitals in New Jersey, Pennsylvania, Ohio, and New York.

Over a dozen Sociology majors worked in paid internships for health, hospital, psychiatric and social welfare agencies funded by the Scranton Mental Health/ Mental Retardation Agency.

Human Service majors select educational, health, welfare, correctional rehabilitation, day care and recreational agencies for their internship settings. Fifty students participated in the undergraduate internship program last year.

Seniors majoring in Accounting are eligible to participate in a 13-week on-the-job internship with both national and regional public accounting firms. This internship usually takes place in December-March of senior year. Selection is made on the basis of QPI rating (minimum 3.0) and on interviews by company representatives. In the most recent year, students worked for such firms as Price Waterhouse, Haskins and Sells, Arthur Andersen, Peat, Marwick, Mitchell & Co., Touche, Ross & Co., Ernst & Ernst, Coopers, Lybrand & Co., in New York, Philadelphia, and other cities. Students majoring in Finance, Management or Marketing are also eligible for internships, both in the Scranton region and in their own localities over the summer months.

Communication and English majors served internships with academic credit in a number of newspaper and television station situations as well as in public relations, campus journalism, theatre directing and related positions.

Political Science and history majors — twenty during 1984-85 — served pre-law internships in private law firms as well as in the Public Defender's Office, District Magistrate offices, District Attorney's office in Scranton, Philadelphia, and a number of other cities.

SECOND DEGREES

Students may pursue a second baccalaureate who already hold the bachelor's degree from an accredited college, provided that the University's general education requirements are met and that at least sixty credits toward a degree in a new field are obtained at the University. Applications should be made through Dexter Hanley College.

ACADEMIC REGULATIONS

DEGREE REQUIREMENTS

In order to earn a bachelor's degree from the College of Arts & Sciences or School of Management the student must complete all the courses prescribed in the curriculum table of the major. No student will be eligible for graduation who has not removed all failures in required courses or who has not earned the necessary minimum 2.0 (C average) Quality Point Index.

Receipt of the degree is not automatic. Seniors expecting to graduate in the spring should make formal application for the degree by February 15.

GRADING SYSTEM

Grade reports are mailed to all students at the end of each semester and these become part of the official record of the student. Freshmen receive mid-semester grades to inform them of their progress. Upperclass students receive notice at the quarter if they are "deficient" and in danger of failing the course at that time.

A	Excellent (outstanding and/or original work)
B, B+	Good
C, C+	Satisfactory
D, D+	Unsatisfactory (passing but well below average)
F	Failure (below minimum acceptable standards)
W	Withdrew officially during first half of course.
WP	Withdrew officially during second quarter with passing grade; deadline is two weeks prior to beginning of final exam period.
WF	Withdrew officially during second quarter with failing grade; computed in QPI as an F; equivalent to Failure.
I	Incomplete — must be removed within three weeks.
S	Satisfactory (Pass) } not figured in Quality Point Index
U	Unsatisfactory (Fail) } not figured in Quality Point Index
Audit	Course not taken for credit. (Change to Audit can be made only by passing students and before end of first half.)

UNSATISFACTORY: Equivalent to failure.

INCOMPLETE: If a course has not been completed because of illness or some other serious reason, an Incomplete may be given. To remove this grade the student must satisfy all course requirements within three weeks of the end of the exam period. Any course not completed by this time will result in a grade of F.

REPEAT OF COURSE: Special permission is not needed to repeat failed courses; however, prior approval of the Dean is needed to repeat non-failed courses.

CHANGE OF GRADE: A student who believes the grade received for a course is unreasonable should first appeal the matter to the professor whose decision is normally final. The student has the right, however, to appeal to the faculty member's chairperson, who will make a recommendation in writing to his or her Dean. The student may request the Dean to review the matter. The Dean may elect to present the matter to the Dean's Conference for review and recommendation. In either case, the decision of the Dean is final. In no instance will a grade change be considered when it has not been raised to the level of the Dean's office within one month from the time the original grade was submitted to the Registrar's office.

QUALITY POINT INDEX

A standard used in judging a student's performance is the Quality Point Index (QPI) determined as follows:

Each semester hour of credit with a grade of A is valued at 4 quality points; B+ at 3.5 quality points; B at 3.0; C+ at 2.5; C at 2.0; D+ at 1.5; D at 1.0. An F or WF (withdrawn failing) yields no quality points. Thus, for example, a three-credit course with the grade A yields 12 quality points; a B yields 9; a C yields 6.

The Quality Point Index (or Quality Point Average) commonly abbreviated QPI (or QPA) is computed by dividing the total number of Quality Points earned by the total number of credits attempted. For example, 15 credit hours, all at C grade, would earn 30 Quality Points or a 2.0 QPI (30/15).

The total number of credit hours attempted include those courses with final grade F or WF as well as A, B, etc. Notice this Quality Point Index applies only to courses taken at the University of Scranton and is not affected by credits transferred from other colleges.

A Quality Point Index listing is made at the end of each semester. On the basis of his or her cumulative Point Index, a student's rank in class and his eligibility for honors at graduation are determined.

GRADUATION HONORS

To be eligible for graduation honors, a student must have completed a minimum of 90 credit hours of work at the University of Scranton.

summa cum laude . . . . . 3.85 Quality Point Index in all subjects
magna cum laude . . . . . 3.65 Quality Point Index in all subjects
cum laude . . . . . 3.50 Quality Point Index in all subjects

DEAN'S LIST

To be eligible for the Dean's List, the student must complete a full program (12 credits minimum; Pass-Fail courses are not included in meeting this minimum). Those students whose QPI for the given semester ranks them in the top 20% of their class are named to the Dean's List for that semester. Names of those on the Dean's List are published each semester and transcripted.

QUALITATIVE REQUIREMENTS

To graduate from the University of Scranton or to remain as a student in good standing, a Quality Point Index of 2.0 (C grade average) is required.

PROBATION AND DISMISSAL

One semester of probation is granted to students whose QPI falls below 2.0. Students who receive an F or WF while on probation are subject to dismissal, as is any student who incurs 2 F's in one semester, or who has accumulated three F's or WF's which have not been successfully retaken. Probation status may be removed by attending summer school or January intersession at the University of Scranton.

Students on Academic Probation are allowed to take no more than 14 credits during the fall or spring semesters without explicit written approval of the appropriate Dean. Students on probation are ineligible to participate in any co-curricular activities with the exception of departmental clubs with an academic orientation (i.e., Psychology Club, Royal's Historical Society, etc.). Intercollegiate athletics, dramatic and theatrical productions, debate, and Student Government are prohibited.

It is University policy in the case of a student dismissed from another institution or a college of the University itself that this student will not be allowed to register for courses in any of the colleges of the University in the semester following dismissal.

CREDIT EQUIVALENTS

One credit or semester hour represents one lecture period of 50 minutes per week. Two or more hours of laboratory work in most disciplines are equivalent to one lecture hour.

LATE REGISTRATION

In courses following a standard schedule (three 50 minute periods per week), no new student may be admitted after 4 class hours. Interpretations of the late registration policy for courses following non-standard schedules must be rendered by the appropriate Dean.

WITHDRAWAL FROM A COURSE

A student wishing to withdraw from a course should first discuss the matter with the instructor. There is always a financial loss to the student when he withdraws from a course and the matter should be carefully considered. If the student believes withdrawal necessary, he should obtain the form for this at the Registrar's Office, have it signed by the instructor and by the appropriate Dean and then return the form to the Registrar's Office. Any tuition credit is based on the date on which the completed form is returned to the Registrar's Office. (See the Schedule of Refunds.) Failure to officially withdraw from a course may result in a failing grade for the course. The absolute deadline for withdrawing from a course is two weeks prior to the start of the final exam period.

ABSENCE FROM CLASS

Freshmen are limited by University regulation to twice as many absences as credits are given for a particular course. Thus six cuts are allowed freshmen in most courses. Upperclassmen have unlimited absences unless the particular professor or the department promulgates in writing some other policy. In any event, students miss class at their own risk.

Students who exceed the cut policy are subject to a failing grade in the course. All absences, for whatever reasons, are covered by the above regulations.

WITHDRAWAL FROM THE UNIVERSITY

Students desiring to withdraw from the University should discuss the matter with the appropriate Dean and, if so instructed, must submit a request for withdrawal from parents or guardian. The student should also discuss the question with his or her counselor. The form for withdrawal can be obtained in the Registrar's Office. It must be signed by all of the student's instructors, by the Counseling Center and by the Dean. Similarly, the Dean of Students initials the form to indicate that the student has returned his or her ID card, and the Library and Treasurer's Office initial the form to indicate that the student's financial accounts with the University are settled. Any tuition refund is based on the date on which the completed form is returned to the Registrar's Office.

SUMMER SCHOOL

The University of Scranton annually offers a Summer School of several sessions to allow students to accelerate their degree programs or to make up courses that may not have been completed during the regular semesters.

University of Scranton students from out of town who have completed their sophomore year (60 credits) are permitted with the prior written permission of the appropriate Dean to attend Summer sessions of four-year colleges or universities only. It should be noted that grades below C received elsewhere are not transferrable to the University of Scranton and that no grades from other institutions are computed into the student's quality point index.

Students on academic probation at the end of the spring semester may attend Summer School at the University of Scranton in order to raise their quality point index or to repeat failed courses.

GENERAL REGULATIONS

The University reserves the right to modify admission requirements at any time; the right to cancel any course without prior notice to the students; change the arrangement of courses, the requirements for graduation, degrees, tuition, fees and other regulations affecting the student body.

The University reserves the right to take appropriate disciplinary action in the case of any student who conducts himself or herself contrary to the standards of the University. These standards (particularly in the area of Academic Integrity,) are given clear expression in the Faculty and Student Handbook of the University.

Alice Murphy, Assistant to the Dean, College of Arts and Sciences.

HONOR SOCIETIES

Those National Honor Societies which are represented in the University of Scranton are listed below in order of the foundation of the local chapters. An asterisk (*) after the name indicates that this National Honor Society is a member of the Association of College Honor Societies.

ALPHA SIGMA NU*

The National Jesuit Honor Society founded in 1915 with chapters in 28 Jesuit universities throughout the United States. The Scranton chapter was founded in 1943, the oldest Honor Society in the University. It is the only Honor Society open to students and faculty in all disciplines and all colleges of the University. Its admission standards are the most rigorous. The Greek letters signify *adelphotes skolastikon nikephoron* — brotherhood of honor students. Juniors and Seniors who have distinguished themselves in scholarship, loyalty and service are eligible for membership. Appointment is made by the President of the University on the recommendation of the Dean and nomination by chapter members of the Society. By tradition, the Dean of the College is moderator. From 1982-1985, Dean William Parente served as national president of the 20,000 member organization.

The Society annually presents the Alpha Sigma Nu University award for teaching. The recipients of the Award:

1969 Prof. Lawrence Mann †
1970 Prof. Frank Brown †
1971 Prof. Thomas Garrett
1972 Prof. Michael DeMichele
1973 Prof. Bernard Williams
1974 Rev. Bernard Suppe, S.J.
1975 Rev. Edward Gannon, S.J.
1976 Prof. Robert A. Sallavanti
1977 Prof. John P. McLean
1978 Prof. Charles J. Thoman
1979 Prof. Urban von Wahlde
1980 Prof. J. Brian Benestad
1981 Atty. John J. McGee
1982 Prof. Harold Baillie
1983 Prof. E. Springs Steele
1984 Prof. John Earl
1985 Prof. Michael C. Cann

Dr. Michael C. Cann
Associate Professor
of Chemistry; 1985
Winner of Alpha Sigma Nu
University Award for Teaching

PHI ALPHA THETA*

International Honor Society in History. Basic requirements: 12 credits in History; Quality Point Index — General 3.0, 3.1 in History. The mu rho chapter was established at the University in 1967.

DELTA MU DELTA*

National Honor Society in Business founded in 1913. Basic requirements: a Quality Point Index of 3.35 with a major in Business or Accounting. The local omega chapter was established in 1968-69.

SIGMA PI SIGMA*

National Honor Society in Physics for undergraduate and graduate students founded in 1921. Its chapters are restricted to colleges and universities of recognized standing which offer a strong physics major. The local chapter was founded in February 1969.

OMICRON DELTA EPSILON*

National Honor Society in Economics. Basic requirements: 12 credit hours in Economics with a General QPI of 3.2 and a 3.0 average in Economics. The local xi chapter of Pennsylvania was founded in May 1969.

PSI CHI*

National Honor Society in Psychology. Founded in 1931, it has established chapters in 260 colleges and universities in 47 states. The local chapter was installed in May 1969.

PHI DELTA KAPPA

International professional fraternity for men and women in education. Membership is limited to graduate students and teachers. Local chapter founded in 1970.

PI GAMMA MU*

National Honor Society in Social Science. Founded in 1924 to improve scholarship in the social sciences and to encourage inter-disciplinary study. Basic requirements: 20 credit hours in social science; Quality Point Index of 3.0. The local alpha epsilon chapter was founded in February 1971. It presents annually the Frank C. Brown Scholarship Medal.

ALPHA SIGMA LAMBDA

National Honor Society to encourage scholarship and leadership among evening students. The alpha upsilon chapter was installed here in 1972.

ETA SIGMA PHI

National Honor Society for students of Classical Languages. The Scranton epsilon gamma chapter was founded in November 1972.

PI MU EPSILON

National Honor Society for Mathematics Majors in Junior or Senior year with a general Quality Point Index of 3.0 and a 3.0 average in Mathematics. The local Pennsylvania mu chapter was installed in February 1973.

ALPHA MU GAMMA

National Honor Society for students of Foreign Languages. Founded in 1931. The Greek letters signify *amphi mouse glosson:* for the muse of languages. The Scranton chapter of theta iota was installed in May 1973.

DELTA SIGMA RHO-TAU KAPPA ALPHA*

National Honor Society in Forensics. Founded in 1963 through merger of societies founded in 1906 and 1908 respectively. The local chapter began in 1975.

DELTA TAU KAPPA

International Social Science Honor Society founded in 1961 is dedicated to high scholastic achievement. The Pennsylvania beta chapter was installed at the University of Scranton in October 1975. Requirements: QPI of 3.5 and 20 credits in social science.

PHI LAMBDA UPSILON

National Honorary Chemical Society established in 1899. The Scranton beta kappa chapter, one of 60 chapters nationwide, was installed in October 1975. For students with 24 credits in chemistry and a 3.0 QPI.

ALPHA EPSILON DELTA*

The National Premedical Honor Society founded in 1926. The Pennsylvania iota chapter was installed at the University in May 1976.

THETA ALPHA KAPPA

National Honor Society in Theology and Religious Studies founded in 1976 at Manhattan College. The University of Scranton alpha nu chapter was installed on April 4, 1980. Twelve credits in theology with a 3.5 QPI are needed for membership.

SIGMA TAU DELTA*

National Honor Society in English founded in 1924, this organization is for students who major or minor in English and rank in the top 35 percent of the class. The local mu omicron chapter first met on April 30, 1980.

ALPHA EPSILON ALPHA

An honor society founded April 30, 1980 at the University of Scranton to recognize scholarship in the general field of communications. For communication majors with a 3.3 QPI.

ALPHA KAPPA DELTA*

International Honor Society for sociology students founded in 1920. Requirements include 18 credits in sociology with a QPI of 3.0 overall and in sociology. The Pennsylvania upsilon chapter was founded here on May 8, 1980.

SIGMA XI

International Honor Society in Scientific Research founded in 1886. The local club was chartered in 1968 and has been authorized since 1979 to induct as associate members undergraduate or graduate students showing outstanding promise in original research.

PI SIGMA ALPHA*

National Honor Society in political science founded in 1920. The kappa iota chapter at the University of Scranton was installed on May 9, 1980. Membership limited to students with at least 10 credits in political science, a QPI of at least 3.0 in these courses, and overall rank in the upper third of the class.

ALPHA PHI SIGMA*

The National Criminal Justice Honor Society founded in 1942. Our local epsilon zeta chapter was installed in May, 1982.

PHI SIGMA TAU*

National Honor Society for students of philosophy. The Pennsylvania tau chapter was installed in the spring of 1983.

UPSILON PI EPSILON

National Computer Science Honor Society. The local gamma chapter was chartered in the spring of 1985.

PRE-LAW PROGRAM

The University is justly proud of its tradition in the field of law. Fully fifty percent of the region's lawyers have done their undergraduate pre-law studies at the University.

The strength of the University's liberal education approach to its pre-law program is indicated by the record of success its graduates have had in winning admittance to the nation's leading law schools. Graduates of the recent graduating class have been admitted to some of the most prestigious schools in the nation, including Columbia, Georgetown, the University of Pennsylvania and the University of Virginia, as well as Cornell, Rutgers, NYU, Boston College, Villanova, Catholic University of America, Temple, St. Louis, Dickinson, Boston U., Notre Dame, and twenty other public and private law schools from California to New England.

Pre-Law Curriculum — For admission to law school, no specific undergraduate major is required. In our last senior class the department of history and political science produced the majority of the 60 Scranton graduates admitted to law school. However, students in languages, business, English, education, sociology, communications, law enforcement and psychology also won admittance to law school. The single most important factor in admission is not therefore a specific major but rather the degree of academic excellence manifested by the student in pursuing whatever major has been chosen as the particular field of competence.

Skills and Courses — While pre-law students are free to choose their majors, they should give particular attention to the development of those skills which are important for success in the study and practice of law. The General Education program of the University is designed to enable pre-law students to acquire these skills.

I. Comprehension and proficiency in Oral and Written Communication:

The University's freshman courses in Oral Communication (Comm. 2) and the Writing Center (Engl. 7) provide a foundation; pre-law students who complete these courses or whose high school record has exempted them, might then take the following courses offered by the faculty:

Comm. 111 — Advanced Composition
Comm. 112 — Debate and Argument
Engl. 12 — Writing for the Law

The student should also consider participating in the Noel Chabanel Debate Society; the *Aquinas,* the college newspaper; the yearbook; and such campus journals as *Esprit* and *Retrospect*.

II. A Critical Understanding of Human Institutions and Values:

Here the University's courses in the field of history and literature, philosophy and theology are most helpful. The curriculum allows students to use courses of interest as cognates to their major program and as part of the humanities area in the General Education program. British and American Constitutional History (Hist. 122-123, 142, 143) are especially recommended.

III. Creative Power in Thinking:

Legal studies and legal work demand the ability to think clearly, carefully and indepen-

dently. It is important therefore that pre-law students cultivate skills in research, logic and critical analysis. Especially recommended are:

Philosophy 28 — Logic
Philosophy 107 — Philosophy of Law
Phil. 112 — Logic/Rhetorical Analysis
Phil. 131-134 — Political Philosophy
Comm. 103 — Logic and Rhetoric

Similarly, quantitative skills are needed. The General Education program allows each student the opportunity for some background in the natural and quantitative or social sciences. Especially recommended as electives or cognates to the major program are:

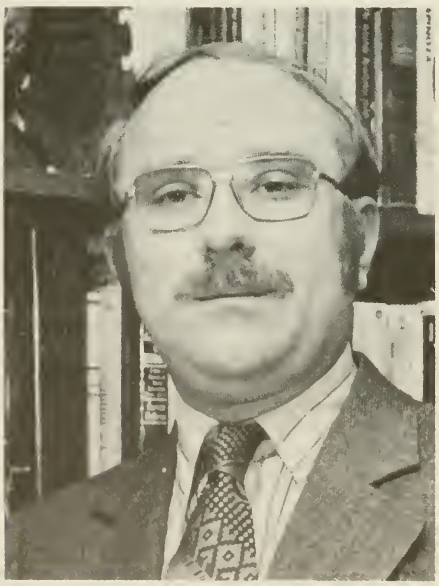
Acc. 3-4 — Accounting
C/LE 151 — Forensic Chemistry
Pol. Sci. 133-136 — Social Science Statistics I-II
Math 1-2 — Math Discovery

Pre-Law Internships — Interested students with Quality Point Index above 3.0 at the time of application may, with the approval of the Dean, receive academic credit for internships served in the offices of either private law firms or various legal agencies such as the District Attorney, Public Defender or District Magistrate. Prior approval of the planned internship is necessary. Application forms for these internships are available from the Pre-Law Advisor.

Pre-Law Advisory Team — Continuing advice on course selection, career planning, and the procedures for law school application is provided by a Pre-Law Advisory Team, composed of Dr. Frank X.J. Homer and Dr. Robert Hueston of the History Department, along with the University's Office of Career Services. The Team is assisted by both the:

Pre-Law Advisory Board, a group of regional lawyers which provides for close contact between the local legal community, a range of national law schools, and the University's pre-law program; and the

Pre-Law Society, a student organization which provides a forum for speakers invited on campus to discuss the many aspects of the legal profession.



Law School Admission Test — Along with a student's undergraduate academic record, the LSAT score is a critical factor in the law school admission process. Ordinarily, pre-law students take the LSAT at the end of their junior year. As a means of assisting University students to score up to their fullest potential on the LSAT, on-campus LSAT workshops are offered at least twice each year. These provide University students with an alternative to costly commercial test preparation services.

Dr. Frank Homer,
Professor of History
University Pre-Law Advisor

PRE-MEDICAL PROGRAMS

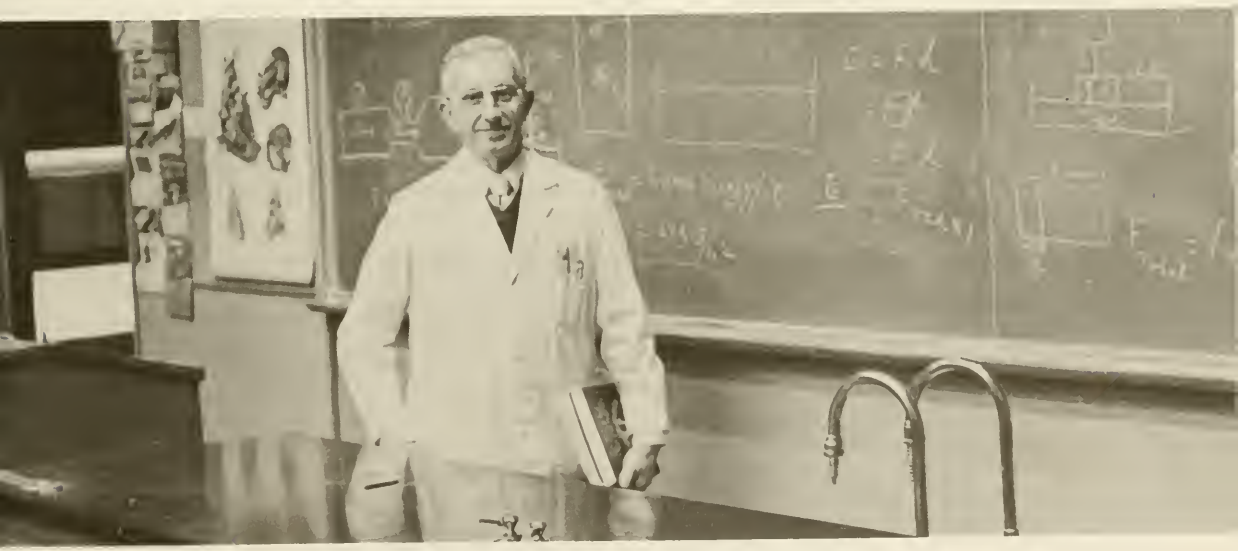
The success of the University's pre-medical program has been outstanding. Notwithstanding the fact that period 1981-82 through 1984-85 has been the most competitive in the history of American medical school admissions, the University of Scranton placed 50 students into American medical schools during three of those four years. Its average for the period was 45 per year. Further, graduates from the pre-professional program have been accepted into dental schools at a rate of 15 per year, and to schools of podiatry, optometry, and other health professions at a rate of 12 per year.

In the past four years, University of Scranton students received approximately 400 acceptances to medical or dental schools including many of the most prestigious in the country: Georgetown, Columbia, Rutgers, Hershey, Johns Hopkins, University of Pennsylvania, Harvard, Thomas Jefferson University, George Washington University, Hahnemann, University of Pittsburgh, Temple, St. Louis University, Medical College of Pennsylvania, New Jersey College of Medicine, Case-Western Reserve, SUNY-Buffalo, Fairleigh Dickinson, Cornell, the University of Washington at Seattle, the University of Chicago, the University of Oklahoma, and New York Medical College.

In addition, other students were admitted to schools of Osteopathic Medicine and Surgery, Podiatry, Pharmacy, Veterinary Medicine, and Graduate School programs in biology, chemistry, biochemistry, psychology, pharmacology and other health-related fields.

Pre-Medical Curricula — Most pre-medical students major in biology. The pre-medical adviser's specific course recommendations for biology majors are listed on the next page. Students majoring in chemistry or biochemistry at the University are also regularly admitted to medical or dental schools. Biochemistry, biophysics and medical technology also provide alternative majors in second, third, or fourth year for those pre-medical biology students who subsequently choose not to apply to medical school.

Curriculum for Biology Majors — The pre-medical adviser is Dr. Joseph Evans, Professor of Biology. He recommends the following structured curriculum for pre-professional students majoring in biology. Completion of this sequence of courses will satisfy all requirements for the biology major as indicated on pages 58 and 59.



Dr. Joseph Evans, Professor of Biology, Pre-Medical Advisor.

RECOMMENDED CURRICULUM FOR PRE-MEDICAL/PRE-PROFESSIONAL STUDENTS

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Biol. 1-2	General Biology I-II	4½	4½
COGNATE	Chem. 11-12	General & Analytical Chemistry	4½	4½
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Biol. 21-22 or 23	Comp. Vertebrate Anatomy or Genetics	4	4
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Math. 13-14 *or* Math. 14-21	Pre-Calculus Math. — Calculus I *or* Calculus I-II	4	4
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Electives	3	6
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19½	19½
		JUNIOR		
MAJOR	Biol. 101, 105, 120-121	Biology Electives	4½	4
COGNATE	Chem. 113	Biophysical Chemistry	4½	
COGNATE	Physics 9-10	General Physics	4	4
GE AREA II	Social/Behavior	Elective		3
GE AREA V	Phil. 110-132	Ethics — Medical Ethics	3	3
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Elective-Intd.	Elective — Interdisciplinary Elective	3	3
			19	20
		SENIOR		
MAJOR	Biol. 103, 122-23, 150, 154	Biology Electives	6	7
GE AREA II	Social/Behavior	Electives	6	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. — T/RS	Philosophy and/or Religious Studies		3
			15	16

TOTAL: 144 credits

It is also recommended that pre-professional students take 6 credits of English literature in Area IV, and both Communication 2 and English 7 in Area III. Medical school candidates are urged to add Chem 121, Biochemistry, in senior year.

UNIVERSITY OF SCRANTON/GEORGETOWN UNIVERSITY SEVEN YEAR DENTAL PROGRAM

The University of Scranton is one of a very small group of schools to be selected for this innovative program. By special arrangement with Georgetown University, highly motivated and academically qualified students who come to the University of Scranton with a clearly defined goal of dentistry may complete both a bachelor of science in biology (B.S.) and the doctor of dental science (D.D.S.) in a seven year period. The first three years are taken at the University of Scranton and enable the student to complete all general education requirements, as well as 13 of the 37 biology credits required for the B.S. degree. The remaining 24 hours will be satisfied by credits accumulated during the first year at Georgetown University Dental School. The B.S. in Biology degree is granted by the University of Scranton after the completion of the first year of dental school.

It should be noted that this program will not affect the normal application and acceptance procedure to Georgetown Dental School by University of Scranton students who are enrolled in the usual four year baccalaureate program.

Georgetown University reserves five places each year for University of Scranton students to enter its dental school on this special basis. Interested students should contact the pre-professional adviser, Dr Joseph Evans, at the beginning of their college careers.

JOINT DEGREE CURRICULUM

The following is the suggested curriculum for students in the joint program.

Dept. and No.	Descriptive Title of Course	Credits	
	FRESHMAN	FALL	SPRING
Biol. 1-2	General Biology	4½	4½
Chem. 11-12	General Chemistry	4½	4½
Communications	Elective		3
Humanities	Electives	3	3
Phil. 20	Intro. to Philosophy	3	
T/RS 21	Intro. to Theology		3
Ph. Ed. 1-2	Basic Physical Ed.	1	1
		16	19
	SOPHOMORE		
Biol. 21 or 23	Comp. Vert. Anatomy or Genetics	4	
Chem. 101-102	Organic Chem. I-II	4½	4½
Math. 13-14	Pre-Calculus-Calculus	4	4
Social/Behavior	Elective		3
Communications	Electives	3	3
Humanities	Electives	3	3
T/RS	Theology/Rel. Studies Elective		3
Ph. Ed. 23-24	Advanced Physical Ed.	1	1
		19½	21½
	JUNIOR		
Physics 9-10	General Physics	4	4
Phil. 110-132	Ethics-Medical Ethics	3	3
Humanities	Electives	3	3
Social/Behavior	Electives	6	3
T/RS	Theology/Rel. Studies Elective		3
Intd. Elec.	Interdisciplinary Elective	3	
Elective	Elective		3
		19	19

The per semester load can be reduced by taking courses during January and/or summer session. For further information, please contact the Dean of Admissions (717) 961-7540.

PORTRAITS OF SUCCESS

Pre-professional advisers with some of the more than 100 members of the class of 1985 admitted to American schools of law and medicine.

Dr. Frank Homer with successful pre-law students.

Dr. Joseph Evans with successful pre-medical students.

Dr. William J. Parente, Dean of the College

THE COLLEGE OF ARTS AND SCIENCES

DEPARTMENTAL PROGRAMS AND COURSES

BIOLOGY

DR. CAREY, *Chairperson*

Courses in the Department of Biology are designed to achieve the following objectives: 1. to present the fundamental scientific facts and concepts which are needed for an understanding of the living world and man's relation to it; 2. to prepare students for advanced study or work in other biological fields.

The Bachelor of Science in Biology Program supplies preprofessional preparation meeting all requirements and recommendations of professional schools (medicine, dentistry, veterinary medicine).

While the department's record in the preparation of physicians is an impressive one as indicated on page 53, its record as one of the baccalaureate sources of PhD's in the biological sciences is equally prestigious. A 1982 study by the office of institutional research at Franklin and Marshall College shows that over the last 60 years, the University of Scranton ranked 27th out of 867 four-year, private, primarily undergraduate institutions.

The biology curriculum appears on the following page. In selecting biology Electives, all majors are required to take one course in at least 3 of the following 4 course groups:

Cell/molecular (C) — Biol. 101, 102, 103, 121, 122, 126, 128, 150, 154.

Organismal (O) — Biol. 21, 22, 105, 115, 120, 121, 122, 123, 124, 128, 132.

Genetics (G) — Biol. 23, 130, 154.

Population (P) — Biol. 108, 110, 115, 124, 130, 132.

The premedical adviser's elective recommendations for preprofessional students are listed on page 54.

BIOL. 1 & 2 Staff
General Biology 9 credits
A comprehensive study of the nature of living organisms, both plant and animal, their structure, function, development and relationships, including the problems of development, heredity, and evolution. 3 hours lecture and 3 hours laboratory each semester.

BIOL. 3 & 4 Staff
General Biological Science 6 credits
The nature of living organisms and general biological principles, as they affect man and in relation to his problems, are stressed in general terms. (GE AREA I)

BIOL. 13 & 14 Staff
Structure and Function of the Human Body 8 credits
A general study of the anatomy and physiology of the human organism emphasizing the body's various coordinated functions from the cellular level to the integrated organ systems. 3 hours lecture and 2 hours laboratory.

BIOL. 21 & 22 Fr. MacEntee
Comparative Vertebrate Anatomy (O) 8 credits
(Prerequisite: Biology 1-2) Structure and phylogeny of vertebrate organ-systems, emphasizing mammalian structure in relation to its function. Amphioxus shark and necturus are subjected to detailed laboratory study in first semester and the cat in the second semester. 2 hours lecture and 4 hours laboratory.

BIOL. 23 Dr. McDermott
Genetics (G) 4 credits
(Prerequisite: Biology 1-2 or 3-4) Principles and theories of heredity as developed by experimental breeding, biometrical and cytological methods with their applications to plant, animal and human heredity. 3 hours lecture and 2 hours laboratory. Spring only.

BIOL. 101 Dr. DelVecchio
Cellular Biology (C) 4½ credits
(Prerequisite: Biology 1-2) Functional dynamics of cellular organelles are explained in terms of the experimental evidence which helped elucidate cellular function. Bio-energetics, molecular evolution, and cytogenetics are also utilized. 3 hours lecture. 3 hours laboratory. Fall only.

BIOL. 102 Dr. McDermott
Molecular Biology (C) 4 credits
(Prerequisite: Biology 1-2, Chem. 11-12) The structure and function of living cells from a molecular viewpoint, nucleic acid structure and function, enzyme structure and function, biochemical mechanisms of differentiation and molecular evolution. This course is intended to be independent from but complementary to Biol. 101. 3 hours lecture and 2 hours laboratory. Spring only.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Biol. 1-2	General Biology I-II	4½	4½
COGNATE	Chem. 11-12	General & Analytical Chemistry	4½	4½
GE AREA III	Communications*	Electives*	3	3
GE AREA IV	Humanities*	Elective*		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Biology	Biology Electives	4	4
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Math. 13-14 or Math. 14-21	Pre-Calculus Math. — Calculus I or Calculus I-II	4	4
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities*	Electives*	3	6
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19½	19½
		JUNIOR		
MAJOR	Biology	Biology Electives	4½	4
COGNATE	Chem. 113	Biophysical Chemistry†	4½	
COGNATE	Physics 9-10	General Physics	4	4
GE AREA II	Social/Behavior	Elective		3
GE AREA V	Phil. 110 Elective	Ethics — Elective	3	3
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Elective-Intd.	Elective — Interdisciplinary Elective	3	3
			19	20
		SENIOR		
MAJOR	Biology	Biology Electives	6	7
GE AREA II	Social/Behavior	Electives	6	3
GE AREA IV	Humanities*	Electives*	3	3
GE AREA V	Phil. — T/RS	Philosophy and/or Religious Studies		3
			15	16
			TOTAL	144 credits

*General Education recommendations:
6 credits English literature in Area IV, Comm. 2 and English 7 for Area III.

†Other cognate courses with written approval of the Chairman may be substituted.

MINOR. To gain a minor in biology, a student must complete Biology 1-2 and 20 additional biology elective credits.

BIOL. 103 Dr. Evans
Histology (C) 4 credits
(Prerequisite: Biology 21-22) The microscopic structure and the functioning relationships of vertebrate tissues and organs with most attention devoted to the mammal. 2 hours lecture and 4 hours laboratory.

BIOL. 105 Dr. Evans
Embryology (O) 4 credits
(Prerequisite: Biology 21-22) Comparative study of reproduction, gametogenesis, fertilization, cleavage, morphogenesis, development of organ-systems in frog, chick and pig. 2 hours lecture and 4 hours laboratory.

BIOL. 107 Staff
Anatomy & Physiology 3 credits
Fundamentals of structure and function of the human body to develop an understanding of its physical nature and operation. (GE AREA I) for non-Biology majors

BIOL. 108 Dr. Carey
Principles of Ecology (P) 4 credits
(Prerequisite: Biology 1-2 or 3-4) Study of physical, chemical, and biological environmental factors that influence organisms and the interrelationships between organisms from individual to community level. 3 hours lecture, 2 hours laboratory. (Fall — even years).

BIOL. 110 Dr Carey
Ornithology (P) 4 credits
(Prerequisite: Biology 1-2 or 3-4) An introduction to both the scientific and popular aspects of bird study. Emphasis on life history, behavior, ecology, and evolution. Laboratory and field trips for identification, banding, and skin preparation. 2 hours lecture, 4 hours laboratory. Summer only.

BIOL. 115 Dr. Carey
Animal Behavior (P, O) 4 credits
(Prerequisite: Biol. 1-2 or 3-4) Classification of behavior types, development, functional advantages and evolution of behavior, and social and physiological aspects studied in lower and higher organisms. 3 hours lecture and 2 hours lab. Spring only.

BIOL. 120 Staff
General Physiology (O) 4½ credits
(Prerequisites: Biology 1-2, Chem. 11-12) Physiological processes underlying the functioning of the animal organism. Biochemistry of protoplasm, enzymes, irritability, excitation, conduction, contractibility, cellular physiology, and functions of mammalian organ-systems. 3 hours lecture and 3 hours laboratory.

BIOL. 121 Fr. Beining, Dr. Evans
Microbiology (C, O) 4½ credits
(Prerequisites: Biology 1-2, Chem. 11-12) Structure, function, growth, reproduction, heredity and relationships of bacteria, yeasts, molds, virus, including a brief survey of pathogens, and life cycles of parasitic microzoa, and also an introduction of disease and immunology. 3 hours lecture and 3 hours laboratory. For all students except nursing.

Dr. Christine McDermott

BIOL. 122 Fr. Beining
Principles of Immunology (C, O) 3 credits
(Prerequisites: Biology 121) The basic molecular, cellular and organismal aspects of the immune response, emphasizing: chemical and functional bases of antigens and immunoglobulins, cellular and humoral response, tolerance, immune deficiency, hypersensitivity, autoimmunity, blood groups, transplantation. Spring only.

BIOL. 123 Staff
Parasitology (O) 4 credits
(Prerequisite: Biology 1-2) Study of various types of human, animal and plant parasites including host-parasite resistance, tolerance, and immunity. Origin and evolution of parasites also discussed. 2 hours lecture and 2 hours laboratory. (Intersession only).

BIOL. 124 Dr. Anderson
Comparative Animal Physiology (P, O) 3 credits
(Prerequisite: Biology 120) Lectures emphasize the physiological principles involved in adaptations

of animals in their environment. Emphasis is placed on the similarities and difference in which related forms have solved these problems. Including such mechanisms of osmotic control, temperature regulation, nerve and muscle physiology, sensory perception, etc. 3 hours lecture. (Spring — even years).

BIOL. 125 Dr. McDermott
Introductory Medical Microbiology 3 credits
(Prerequisites: Biology 13-14; Chemistry 13-14) Fundamentals of Microbiology, including structure, function, identification, pathogenesis, epidemiology and control of microorganisms with special emphasis on human pathogens. 2 hours lecture and 2 hours laboratory.

BIOL. 126 Dr. McDermott
Virology (C) 3 credits
(Prerequisites: Biology 1-2; Chemistry 101-102) Detailed study of the bacterial, plant and animal viruses, including structure, chemistry, replication, genetics, origin and evolution, as well as pathogenesis of an immunity against selected viral pathogens. 3 hours lecture. Fall only.

BIOL. 128 Dr. Cosentino
Endocrinology (C, O) 4 credits
(Prerequisite: Biology 120) An examination of the endocrine system with a focus on the cellular mechanisms of hormone action. The course will emphasize mammalian endocrinology, but will also survey endocrine mechanisms in invertebrates. 3 hours lecture and 2 hours laboratory. Spring only.

BIOL. 130 Dr. Carey
Evolution (G, P) 3 credits
(Prerequisite: Biology 1-2 or 3-4) A consideration of the theories of evolution and evidences for them in plants and animals. Population and the adaptiveness of various organic traits. (Fall — odd years).

BIOL. 132 Dr. Hardisky
Plant Anatomy and Physiology (O, P) 4 credits
(Prerequisite: Biol. 1 or 3 or permission of instructor) An introduction to the functional anatomy of plants including some basic aspects of plant physiology. Areas of study will include plant structure, photosynthesis, respiration, mineral nutrition, water relations, productivity, and energy flow. 3 hours lecture and 2 hours laboratory. Fall only.

BIOL. 134 Staff
Undergraduate Research Variable credit
(Prerequisites: 12 credits in Biology, Chemistry 101-102, Physics 1-2) Individual problems for advanced students with sufficient background in biological and physical sciences. Subject time and credit arranged individually.

BIOL. 150 Dr. Anderson
Electron Microscopy (C) 4 credits
(Prerequisite: Biology 1-2, Consent of instructor) Introduction to the mechanics of the electron microscope with emphasis on standard laboratory techniques, including preparation of materials, sectioning, viewing and photographic analysis. 1 hour lecture and 6 hours laboratory. Spring only.

BIOL. 154 Dr. DelVecchio
Biology of the Gene (C, G) 4½ credits
(Prerequisite: Biology 1-2 or 3-4) A detailed study of the nature and function of the unit of heredity — the gene — with emphasis on the experimental evidence which gave rise to the present concepts of genetics of individuals, populations, races, and species. 3 hours lecture 3 hours laboratory. Spring only.

BIOL. 160 Dr. DelVecchio
Introduction to Horticulture 3 credits
Biological principles are introduced utilizing practical horticulture methods such as plant diseases and garden planning. Extensive use of greenhouse. 2 hours lecture, 2 hours laboratory.

BIOL. 170 Staff
Special Topics in Biology 2-4 credits
Study and analysis of selected topics in biology. The particular topic will vary from year to year based on student/faculty interest and current research advances. May include such topics as genetic engineering, sensory reception, membrane biology, population genetics, etc.

COURSE GROUPS:
C — Cell and Molecular Biology
O — Organismal Biology
G — Genetics
P — Population Biology

BYZANTINE STUDIES

FR. LEVKO, S.J., Ph.D., *Director*

The University of Scranton sponsors a Byzantine Studies Program directed by a Byzantine Rite Jesuit, the Rev. Dr. John Levko, associate professor of mathematics.

In an ecumenical age which is bringing together Eastern and Western Christianity, it is important to have knowledge and experience of the traditions, liturgies, literatures and theologies of the different rites. The University provides a weekly liturgy in the Byzantine Rite to which all are invited.

The Byzantine Studies Program is a multidisciplinary concentration of courses, any eight of which (24 credits) may be elected by the student in order to have the "Byzantine Studies" concentration added to the transcript.

The concentration is open to students in all majors and may be taken as part of the Cognate requirement (with the major chairman's permission) or as part of the General Education requirement in GE AREA II (Social Science), IV (Humanities), V (Theology/Philosophy). Students majoring in history, theology, and English may in addition utilize some of the courses in the major itself.

Courses presently available in the concentration are listed below:

Rev. John Levko, S.J.

Engl 161 **Modern Russian & Scandinavian Drama** (GE IV) Dr Ryan
Engl 163 **Russian Literature** (GE IV) Dr. Ryan

Hist 150-151 **Imperial & Revolutionary Russian History** (GE IV) Dr. Earl
Hist 155-156 **Byzantine Civilization** (GE IV) Fr. Scott, S.J.
H/PS 188 **Ethnic & Racial Minorities in NE Pennsylvania** (GE II OR IV) Dr. DeMichele

Mus 105 **Story of the Symphony** (GE IV) Sr. Roccasalvo, C.S.J.
Mus 106 **Music of the Cathedrals** (GE IV) Sr. Roccasalvo, C.S.J.
Mus 110 **Opera** (GE IV) Sr. Roccasalvo, C.S.J.
Mus 114 **Bach to Rock** (GE IV) Sr. Roccasalvo, C S.J.

Phil 145 **Mysticism East and West** (GE V) Fr. Jarvis, S.J.
Rus 1 **Elementary Russian** (GE III) Staff
Slav 107 **Masterworks of Russian and Slavic Literature** (GE IV) Dr. Petrovic

T/RS 130 **Prayer** (GE V) Dr. Steele
T/RS 132 **Symbolic Dimensions of Faith** (GE V) Fr. Walsh
T/RS 144 **Introduction to the Theology of the Byzantine Churches** (GE V) Fr. Sable
T/RS 145 **Introduction to Eastern Liturgies** (GE V) Fr. Sable
T/RS 147 **Eastern Christian Spirituality** (GE V) Fr. Levko, S.J.
T/RS 152 **Liturgical Theology of Byzantine Church** (GE V) Mr. Yevics
T/RS 155 **Introduction to the Greek Fathers** (GE V) Dr. Benestad

CHEMISTRY

DR. HART, *Chairperson*

In the last three academic years, seniors graduating from the department were admitted to doctoral programs at such universities as Brown, Maryland, Purdue, Pennsylvania, Case-Western Reserve, SUNY-Buffalo and the Sloan-Kettering Institute, as well as to professional schools such as Georgetown Medical and Dental, Jefferson Medical, the Medical College of Pennsylvania, Johns Hopkins Medical School, and the Dental Schools of Boston U., Temple, U. of Pa., and Pittsburgh

The department offers four concentrations: Chemistry, Biochemistry, Chemistry-Business, and Medical Technology. The program in Chemistry is accredited by the American Chemical Society In addition, the Chemistry and Biochemistry concentrations are offered in conjunction with the Graduate School in five-year B.S.-M.A. degree programs. The strength of the department is indicated by the latest statistics of the American Chemical Society which report that the University of Scranton was one of the largest producers of master's degrees in chemistry in the country, during the last decade.

The strength of the department is also indicated in the recent study of the office of institutional research at Franklin and Marshall College which ranked the University of Scranton 50th out of 867 private, four-year, primarily undergraduate colleges as the baccalaureate source of those earning PhD's in chemistry between 1920 and 1980. The same study shows that the University of Scranton ranks 27th out of 867 as the baccalaureate source of PhD's in the biological sciences. The central role of the chemistry department in both of these ranks is obvious.

CHEMISTRY CONCENTRATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Math. 13-14 *or* 14-21	Pre-Calculus Math & Analysis I *or* Analysis I-II	4	4
GE AREA II	Social/Behavioral	Elective		3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			18½	18½
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Chem. 130	Inorganic Chemistry		4½
COGNATE	Math. 21-22 *or* 22-101	Analysis II-III *or* III and Diff. Equations	4	4
COGNATE	Physics 11-12	Elements of Physics	4	4
GE AREA III	Communications	Elective*	6	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19½	18
		JUNIOR		
MAJOR	Chem. 103-125	Organic Chem. III-Instrumental Analysis	5	5
MAJOR	Chem. 123-124	Physical Chemistry I-II	4½	4½
MAJOR	Chem. 127-128	Chemical Literature — Seminar	1	1
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE FREE	Intd	Interdisciplinary Elective		3
			19½	19½
		SENIOR		
MAJOR	Chem. 135	Adv. Inorganic Chem.		3
MAJOR	Chem. 131-132	Undergraduate Research	1½	1½
MAJOR	Chem. Elective	Chemistry Elective	3	
GE AREA II	Social/Behavioral	Elective		3
GE AREA IV	Humanities	Electives		6
GE AREA V	Phil-T/RS	Electives	6	3
GE FREE	Elective	Elective	3	
			13½	16½

TOTAL: 143½ credits

*Department recommends Comm. 2, Engl. 7 and CMPS 20.

N.B. for A C S accreditation, Chemistry majors must complete Analysis III and Math 101

BIOCHEMISTRY CONCENTRATION

The Bachelor of Science in Biochemistry Program parallels the B.S. in Medical Technology for the first two years so that opportunity is afforded the student to change from one program to the other. In both the Chemistry and Biochemistry Program, the departmental General Education Area recommendations are: 6 credits of modern language from AREA III or FREE AREA; 3 credits of Computer Science 20 from AREA III.

With permission of the chairperson, a concentration in *food biochemistry* is possible using the following substitutions: Enzymology (Chem. 177) for Organic Chem. III (Chem. 103); Food Chemistry and Nutrition (Chem. 172) for General Physiology (Bio. 120); Food Analysis (Chem. 175) for Biochem Lab (Chem. 121 L); and Agricultural Chem I and II (Chem. 173-74) for the free elective.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Biol. 1-2	General Biology I-II	4½	4½
COGNATE	Math. 13-14 *or* 14-21	Pre-Calculus Math & Analysis I *or* Analysis I-II	4	4
GE AREA III	Communications	Elective*	3	
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			17	20
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Chem. 130	Inorganic Chemistry		3
COGNATE	Biol. 121-120	Microbiology — General Physiology	4½	4
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19	18½
		JUNIOR		
MAJOR	Chem. 103-125	Organic Chem. III — Instrumental Analysis	3½	5
MAJOR	Chem. 127-128	Chemical Literature — Seminar	1	1
COGNATE	Phys. 9-10	General Physics	4	4
GE AREA II	Social/Behavioral	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Intd.	Interdisciplinary Elective		3
			17½	19
		SENIOR		
MAJOR	Chem. 113-114	Biophysical Chemistry I-II	4½	4½
MAJOR	Chem. 121-122	Biochemistry I-II	6	3
MAJOR	Chem. 131-132	Undergraduate Research	1½	1½
GE AREA IV	Humanities	Electives	3	6
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
			18	18

TOTAL: 147 credits

*Department recommends Engl. 7, Comm. 2, CMPS 20.

CHEMISTRY-BUSINESS CONCENTRATION

The Chemistry-Business concentration combines theoretical and technical instruction in Chemistry with management training in Business. Graduates of this program will be concerned not only with chemical research and technological development but also with management problems in science-related industries.

Most chemistry majors tend to be research-oriented although almost half of the approximately 100,000 chemists employed in American private industry are engaged in work other than research and development: management, marketing and sales. This combined degree was formulated to prepare chemists to assume these latter responsibilities.

From the point of view of the business student, almost one-third of all business graduates can expect to be employed in a chemistry-related field: pharmaceuticals, plastics, petroleum, etc. Most business majors employed in such industries must develop, often on their own, the technical knowledge needed to understand their company's operations and products. A fundamental background in chemistry as provided in this concentration is a distinct advantage to individuals planning such a career.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
MAJOR	Econ. 11-12	Principles of Economics I-II	3	3
COGNATE	Math 13-14	Pre-Calculus Math — Analysis I	4	4
GE AREA III	Communications	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			15½	15½
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Acc. 3-4	Financial — Managerial Acctg.	3	3
GE AREA II	Social/Behavior	Elective		3
GE AREA III	CMPS 21-127	Intro to CMPS — Information System*	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	T/RS 21	Introduction to Theology	3	
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			17½	17½
		JUNIOR		
MAJOR	Chem. 171-128	Industrial Chemistry & Seminar	3	1
MAJOR	Mgt. 108-116	Org. & Mgt. — Organizational Behavior	3	3
MAJOR	Mgt. 109-115	Intro to Mgt Science — Prod and Op Mgt	3	3
COGNATE	Chem. 149	Chemical Statistics		3
GE AREA II	Social/Behavior	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 133-T/RS	Business Ethics* — Theology Elective	3	3
GE FREE	Intd.	Interdisciplinary Elective	3	
			18	19
		SENIOR		
MAJOR	Fin. 110-Mar. 107	Corporate Finance — Managerial Mktg	3	3
MAJOR	Mgt. 9	Legal Environment of Business	3	
COGNATE	Phys. 9-10	General Physics	4	4
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil.-T/RS	Elective		3
			19	16

An asterisk (*) indicates departmental recommendation

TOTAL: 138 credits

B.S. IN MEDICAL TECHNOLOGY CONCENTRATION

The Bachelor of Science in Medical Technology degree program, under the direction of Dr. Michael Cann, is designed to train and qualify students as medical technologists or clinical laboratory scientists serving in hospitals, clinical laboratories, industrial or research institutions. The program, one of the largest in the commonwealth, meets and exceeds the requirements of the Committee on Allied Health Education and Accreditation. For 1985-86, seventeen students received acceptances at ten different hospitals for their clinical (senior) year.

The program involves the satisfactory completion of the first three years of a curriculum of study (indicated below) at the University of Scranton and the fourth year of clinical education at a hospital having a School of Medical Technology approved by the CAHEA through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). After completing the program, students take a national certification examination. To date the University has arranged affiliation with hospitals in the cities of Allentown, Bethlehem, Bryn Mawr, Abington, Danville, Bristol, Williamsport, Somerville, New Brunswick, Philadelphia, Scranton, Paterson and Akron. See affiliations at end of Bulletin.

The curriculum for the B.S.M.T. parallels the B.S. in Biochemistry program so that students have the option to change to the latter after three years, should their career goals change.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Biol. 1-2	General Biology I-II	4½	4½
GE AREA II	Social/Behavioral	Electives		3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Biol. 121-120	Microbiology — General Physiology	4½	4½
COGNATE	Math 13-14	Pre-Calculus Math — Analysis I	4	4
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110-132	Ethics — Medical Ethics	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			20	20
		JUNIOR		
MAJOR	Chem. 121-125	Biochemistry I — Instrumental Analysis	3	5
COGNATE	Phys. 9-10	General Physics	4	4
COGNATE	Biol. 122	Principles of Immunology	3	
GE AREA II	Social/Behavior	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. T/RS	Electives	3	3
GE FREE	CMPS 20	Intro. to Computer Science	3	
			19	18
		SENIOR		
		Clinical Education		
MAJOR		Clinical Microbiology		
MAJOR		Clinical Chemistry		
MAJOR		Clinical Hematology/Coagulation		
MAJOR		Clinical Immunohematology		
MAJOR		Clinical Immunology/Serology		
		Clinical Seminar		
			16	16

TOTAL: 144 credits

N.B. There is a $125 Internship Fee charged for each semester of senior year to cover University administrative cost. The student is not, however, charged University tuition for the credits earned in senior year. Some hospitals may charge their own fees. The department has an outstanding record in having its students accepted into medical technology programs. It should be clear, however, that as in the case of accounting internships or medical school acceptances, admission to clinical education is competitive and dependent on the student's academic record and success in the interview. The hospital is responsible for selection. A delay in beginning the clinical education may delay a student's graduation Credits for senior year courses vary from 28 to 32 depending on hospital. Course titles in that year may also vary.

CHEM. 3 Staff
Cultural Chemistry 3 credits
An elementary study of the field of chemistry for the non-science major: concepts of structure, states of matter, modern developments, implications of the field for modern society. 3 hours lecture. (GE Area I)

CHEM. 11-12 Staff
General and Analytical Chemistry 9 credits
A study of the laws, theories and principles of general chemistry together with qualitative and quantitative analysis. Laboratory work covers semi-micro techniques for qualitative and quantitative analysis (gravimetric and volumetric analysis). 3 hours lecture and 3 hours laboratory each semester.

CHEM. 13-14 Staff
Introductory Chemistry 8 credits
A study of the fundamental concepts of general chemistry, organic chemistry and biochemistry. Laboratory work emphasizes skills and procedures relevant to the living system. 3 hours lecture and 2 hours laboratory each semester.

CHEM. 101-102 Staff
Organic Chemistry I-II 9 credits
(Prerequisites: Chemistry 11-12) An introduction to the chemistry of the principal aliphatic and aromatic compounds of carbon and their derivatives. Laboratory work includes investigation of the chemical properties and synthesis of the compounds studied. 3 hours lecture and 3 hours laboratory each semester.

CHEM. 103 Dr. Thoman, Dr. Cann
Organic Chemistry III 3½-5 credits
(Prerequisites: Chemistry 101-102) A continuation of Chemistry 101-102, emphazing the study of the major types of organic mechanisms. Laboratory work involves advanced techniques. 2 hours lecture, and 6 hours laboratory (3 hour lab for biochemistry majors).

CHEM. 113 Dr. Hart
Biophysical Chemistry I 4½ credits
(Prerequisite: Chemistry 101-102) An introduction to the application of physical-chemical principles to biological problems. This involves aqueous solutions, colloidal chemistry, thermodynamics, electro-chemistry, chemical kinetics and nuclear chemistry. Laboratory work involves mainly experiments dealing with colloidal phenomena, chemical kinetics and nuclear chemistry. 3 hours lecture, 3 hours laboratory.

CHEM. 114 Staff
Biophysical Chemistry II 4½ credits
(Prerequisite: Chemistry 113) A study of the bioenergetics, enzyme kinetics and cryobiochemistry as related to cellular phenomena Laboratory work includes enzyme kinetics, energetics and special projects. 3 hours lecture, 3 hours laboratory.

CHEM. 121 Staff
Biochemistry I 6 credits
(Pre or corequisites: Chemistry 102 and 113 or 123) Principles of biochemistry and biophysical chemistry including enzyme kinetics. A study of the chemical nature of lipids, carbohydrates, proteins, nucleic acids and enzymes including relationships between vitamins, hormones and inorganic compounds. 3 hours lecture and 6 hours lab. (Lab required of biochemistry majors.)

CHEM. 122 Staff
Biochemistry II 6 credits
(Pre or corequisites: Chemistry 102 and 113 or 123) A study of the metabolism, digestion and absorption of carbohydrates, lipids, amino acids and proteins, including energy transformations together with the role of enzyme systems in the above processes. 3 hours lecture and 6 hours optional lab.

CHEM. 123-124 Dr. Hart
Physical Chemistry I-II 9 credits
(Prerequisites: Chemistry 11-12, Mathematics 21-22) A study of the physiochemical properties of matter and the dynamics of chemical reactions. Laboratory experiments illustrate the principles studied. 3 hours lecture and 3 hours laboratory each semester.

CHEM. 125 Dr. Vinson
Instrumental Analysis 5 credits
(Prerequisite: Chem. 113 or 123) Instrumental methods of analysis consisting of theory and application of such instrumental techniques as spectroscopy, polarography and instrumental titrimetry. Laboratory stresses instrumental analysis and techniques. 2 hours lecture and 6 hours laboratory.

CHEM. 127 Dr Cann
Chemical Literature and Writing 1 credit
A study of the published source material of chemical science and industry. The course includes practical instruction in library technique and in the written reporting of results. 1 hour lecture.

CHEM. 128 Staff
Seminar 1 credit
Current topics in chemistry, biochemistry, food science and chemistry-business are prepared and presented by the students.

CHEM. 129 Dr. Hart
Physical Chemistry III 3 credits
(Prerequisites: Chemistry 123-24) Special topics including classical and quantum statistics and thermodynamics, molecular and solid state structure and quantum chemistry. 3 hours lecture.

CHEM. 130 Dr. Hart
Inorganic Chemistry 3 credits
(Prerequisites: Chemistry 123-124) Descriptive chemistry of selected elements and their compounds correlated with the periodic table physical properties, atomic, and molecular structure, bonding and the ligand theory. 3 hours lecture.

CHEM. 131-132 Staff
Undergraduate Research 3 credits
(Prerequisites: Chemistry 102, 113 or 123, 127) Individual study and research in connection with a specific chemistry or biochemistry problem. Results must be written as thesis and defended before the department. 1½ credits each semester.

CHEM. 135 Dr. Hart
Advanced Inorganic Chemistry 3 credits
(Prerequisites: Chem 123-24) Theoretical concepts and their application to the reactions and structure of inorganic compounds. Coordination chemistry and related topics, physical methods, reaction mechanisms.

CHEM. 147-148 Dr. Hart
Intermediate Physical Chemistry 6 credits
A review of the fundamentals of chemical principles, and a treatment of the mathematics requisite for such review. 3 hours lecture each semester.

CHEM. 149 Dr. Marino
Chemical Statistics 3 credits
(Prerequisite: Math 13) The practical objective of statistics and the analysis of scientific data. Emphasis is placed on those statistical techniques accepted by the major chemical journals. The recording, manipulating, and summarizing of scientific data. 3 hours lecture.

C/LE 151 Dr. Thoman, Dr. Appleton
Forensic Chemistry 3 credits
No prerequisite. Designed for law enforcement majors as well as science majors, this is a study of the rules of evidence and the position of the expert scientific witness in law, followed by a review of the uses of scientific, and particularly chemical, evidence in various phases of the investigation and trial of criminal actions. (Area I)

CHEM. 153 Dr. Thoman, Dr. Appleton
Chemical Toxicology 3 credits
(Prerequisites: Chemistry 101-102) The nature, mode of action and methods of counteracting substances which have an adverse effect on biological systems, especially human. Medical, industrial, environmental and forensic aspects will be dealt with. 3 hours lecture.

CHEM. 171 Dr. Appleton
Industrial Chemistry 3 credits
A review of chemical operations and unit or batch processes common to the industry. Econometric analysis involving supply-demand, productivity, commodity prices and costing is an important area covered. Measures of productivity and patent activity. 3 hours lecture.

CHEM. 172 Dr. Appleton
Food Chemistry and Nutrition 3 credits
(Prerequisites: Chemistry 102, Biology 121) The chemistry and nutritional characteristics of natural and processed foods. This includes carbohydrates, lipids, proteins, minerals, vitamins, food additives and enzymes. 3 hours lecture.

CHEM. 173 Dr. Marino
Agricultural Chemistry I 3 credits
(Prerequisite: Chemistry 121) A study of the various biochemical pathways of photosynthetic carbon dioxide fixation in plants. 3 hours lecture.

CHEM. 174 Dr. Marino
Agricultural Chemistry II 3 credits
(Prerequisite: Chemistry 121) An intensive study of soils and nitrogen fixation, the former including composition, physical and chemical properties and their care for agricultural purposes. 3 hours lecture.

CHEM. 175 Drs. Dreisbach, Vinson
Food Analysis 3 credits
The course will involve both the "official methods of analyses" and newer research methodologies. Materials to be analyzed include food vitamins, cosmetics and drugs. One hour lecture and 4 hours laboratory.

CHEM. 177 Staff
Enzymology 3 credits
A course in the chemical nature of enzymes with relation to mechanisms of enzyme action and kinetics, purification and identification of enzymes and isoenzymes. Biochemical and physiological aspects of enzymes in living systems. 3 hours lecture.

COMMUNICATION AND MEDIA STUDIES

FR. HAMERNICK, *Chairperson*

This program explores the entire range of the communication process and, therefore, includes both communication (the study of the development of human relationship) and mass media studies (courses which concentrate on the evolution of media, their impact, and the skills necessary to make use of these instrumental causes of communication). Communication courses are focused to develop the analytical and reflective capabilities of students, and are supplemented with elective media concentrations in journalism, broadcasting, and advertising and public relations. These elective sequences provide opportunity for professional off-campus experience for those who meet departmental qualifications.

The goals of the department are to develop in its students analytical proficiency, reflective competence and methodological skills necessary to accommodate responsible involvement in their careers. The program prepares its students for both graduate studies and career entry.

	Dept. and No.	Description Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Comm. 51-104	Inquiry-Interpersonal	3	3
MAJOR	Media Elective	Media Elective		3
GE AREA II	Soc. 21	Principles of Sociology*	3	
GE AREA II	P.S. 175	Contemporary World Problems*		3
GE AREA IV	Humanities	Electives†	3	6
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21-Elec.	Intro. to Theology—Elect.	3	3
PHYS EDUC	Electives	Electives	1	1
			16	19
		SOPHOMORE		
MAJOR	Comm. 105	Introduction to Linguistics	3	
MAJOR	Comm. 104	Logical & Rhetor. Analysis	3	
MAJOR	Media Electives	Media Electives	3	6
COGNATE	Electives	Electives	3	3
GE AREA I	Physics 25-26	Role of Electronics in Comm.	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Elective		3
GE FREE	Elective	Elective	3	
PHYS EDUC	Electives	Electives	1	1
			19	19
		JUNIOR		
MAJOR	Comm. 107-198	Comm. Theory-Internship	3	6
MAJOR	Media Electives	Media Electives	3	6
COGNATE	Electives	Electives	3	3
GE AREA I	Phys. 19	Biophysics of Communication*	3	
GE AREA IV	Humanities	Electives	6	
			18	15
		SENIOR		
MAJOR	Comm. 108	Communication Ethics	3	
MAJOR	Comm. 109-110	Senior Studies-Thesis	3	3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Elective		3
GE AREA V	T/RS-Phil.	Elective	3	
GE FREE	Intd.-Electives	Interdisciplinary-Electives	3	6
			18	18

TOTAL: 142 credits

*Indicates recommended course.

†For Freshmen, GE Area IV, at least one semester of History 1 or History 3 is recommended.

MEDIA ELECTIVE SEQUENCES

JOURNALISM

Print:
151 Intro. to Journ.
152 Advanced Journ.
111 Advanced Comp.
121 Man & Mass Media
122 Mass Media & Law
123 Mass Media Mgt.
198 Internship
199 Internship

Radio:
151 Intro. to Journ.
152 Advanced Journ.
156 Radio Journalism
121 Man & Mass Media
122 Mass Media & Law
123 Mass Media Mgt.
198 Internship
199 Internship

Television:
151 Intro. to Journ.
157 Television Journalism
158 Adv. Television Journ.
121 Man & Mass Media
122 Mass Media & Law
123 Mass Media Mgt.
198 Internship
199 Internship

RADIO AND TELEVISION PRODUCTION

Radio:
131 Radio Prg. & Prod.
132 Radio Practicum
121 Man & Mass Media
122 Mass Media & Law
123 Mass Media Mgt.
124 Audience Analysis
198 Internship
199 Internship

TV:
140 TV Production
141 TV Studio
143 Adv. TV Prod.
121 Man & Mass Media
122 Mass Media & Law
123 Mass Media Mgt.
198 Internship
199 Internship

ADVERTISING AND PUBLIC RELATIONS

161 Advertising
162 Advertising Practicum
171 Public Relations
172 Professional Writing
121 Man and Mass Media
122 Mass Media and Law
123 Mass Communications Management
198 Internship

COMM. 2 Staff
Fundamentals of Speech 3 credits
A study and application of the skills which are necessary for the attainment of proficiency in speech. Laboratory techniques for individualized instruction will be stressed; tapes and other modern media will be used. Successful completion of this course fulfills the speech skills requirement of the college.

COMM. 51 Fr. Hamernick, Prof. C. Wallace
Inquiry Into the Nature of Communication and Media 3 credits
An exploration of the essential differences between communication and media. A brief examination of both intra- and interpersonal communication, the nature of media and the media-culture problematic. Attention is focused on the electromagnetic nature of telemedia and its impact on the social environment.

COMM. 101 Dr. Solomon
Man and His Symbols 3 credits
Using Carl Jung's book, *Man and His Symbols*, as the focal point, this course will explore the meaning and function of symbolism in literature, television, film, advertising and other forms of communication and media.

COMM. 103 Prof. Warner
Logical and Rhetorical Analysis 3 credits
A study of the principles of logic and persuasion, an analysis of fallacies, the principles of structure in written and oral composition. Practice in briefs and abstracts with an emphasis on exactness and clarity. (GE AREA III or IV).

COMM. 104 Fr. Hamernick
Interpersonal Communication 3 credits
(Prerequisite: Comm. 51) An examination of the nature of relationship and its various types. Using the depth psychology of Carl Jung, attention is directed to the phenomenon of transference which is often mistaken for relationship and a brief examination is made of its potentially destructive consequences. The balance of the course is directed to the nature of relationship and its qualities: trust, self-disclosure, commitment and involvement.

COMM. 105 Dr. Rakauskas
Introduction to Linguistics 3 credits
An attempt to understand the systematic ways in which human communication is achieved. A particular emphasis will be put on an investigation of the findings of linguistic scholarship, especially with regard to the workings of the English language.

COMM. 107 Prof. Pearce
Communication Theory 3 credits
Nature, scope and media of communications. Historical, systemic technological and cultural perspectives. The course provides a theoretical groundwork for future communications study.

COMM. 108 Fr. Hamernick
Communication and Media Ethics 3 credits
(Prerequisites: Comm. 51 and 104, and Phil. 110) An investigation of ethical questions which address both communication and media. The course includes a discussion of the basic methodology and principles for reaching ethical decisions and the resolution of case problems.

COMM. 109 Dr. R. Wallace
Senior Studies 3 credits
This interdisciplinary offering provides a crosssectional investigation of the issues and opportunities within the field of communication and media. The student will find the reading list, guest speakers and lecture materials helpful (1) preparing for the comprehensive examination which is both a departmental and course requirement for this class, and which is administered in the Fall, and (2) for preparing the senior thesis prospectus.

COMM. 110 Staff
Senior Thesis 3 credits
Individually directed by faculty, the student will be guided through a research or production project in the Spring semester of Senior year.

MEDIA COURSES

MEDIA 111 Dr. Rakauskas
Advanced Composition 3 credits
(Prerequisite: Engl. 7 or exemption) The purpose of this course is to review, practice and apply the principles of a rhetoric of order, stressing invention, disposition, style, tone and theme. (GE AREA III)

MEDIA 112 Prof. Warner
Argumentation and Debate 3 credits
A study of the techniques of argumentation and persuasion. Major areas of concentration are in research, case construction and analysis. (GE AREA III and IV)

MEDIA 121 Dr. McInerney
Man and Mass Media 3 credits
A study of the development of films, radio and television in 20th century America; the basic techniques by which they deliver their message, and the ways in which they interact with other factors to shape our culture. (GE AREA III)

MEDIA 122 Prof. C. Wallace, Prof. Pearce
Mass Media and the Law 3 credits
Laws, rules and regulations which apply to broadcast media, implications of self-regulation, FCC regulation and other forms of control and protection.

MEDIA 123 Dr. R. Wallace
Mass Media Management 3 credits
The multifaceted role of managers in mass media enterprises warrants this study of managing oneself and others, plus content and audience analysis.

MEDIA 131 Dr. R. Wallace
Radio Programming and Production 3 credits
Delineates the evolving roles of radio-producer-directors. Laboratory assignments explore the

entire range of conventional radio program types. Lab fee.

MEDIA 132 Dr. R. Wallace
Radio Practicum 3 credits
Surveys all aspects of a radio station: audio control, equipment operation and maintenance. Lab fee.

MEDIA 141 Prof. Pearce
Television Production 3 credits
"Behind the scenes" operation of television production. Included are types of shows, rationale for each, and production techniques peculiar to each. An opportunity to produce, tape and direct a show using one of the techniques will be a major class project Lab fee. (GE AREA III)

MEDIA 142 Prof. Warner
Educational Television 3 credits
Use of the television media for instructional purposes both public and classroom. Current usage by educational television stations and secondary schools, including both broadcasting and closed circuit television. Types of educational programs are evaluated. A final classroom instructional situation is presented by each student in his own discipline. (GE AREA III)

MEDIA 143 Prof. Pearce
Advanced Television Production 3 credits
Building upon the foundation acquired in Media 141, this course enables students to pursue specialized projects under supervision in order to maximize their technical expertise. Lab fee.

MEDIA 144 Prof. C. Wallace, Dr. McInerney
Writing for Television' 3 credits
Introduction to the script format for television documentaries and for dramatic productions of varying length. Students are required to master the "technique" of preparing television scripts. Four major assignments and several short "learning projects."

MEDIA 145 Prof. Pearce
Propaganda 3 credits
The nature of modern propaganda. The medium and message of various successful propaganda campaigns. Detailed analysis of Soviet, Nazi, French, Israeli and American propaganda.

MEDIA 151 Staff
Introduction to Journalism 3 credits
(Prerequisite: Engl. 7 or exemption) Organizations and functions of newsgathering. Relationships among different news media, responsibilities of journalistic institutions and role of press in society. The student is introduced to newsgathering and newswriting techniques employed in various media. (GE AREA III)

MEDIA 152 Staff
Advanced Print Journalism 3 credits
(Prerequisite: Media 151) News evaluation, copy editing, headline writing, interviewing, makeup, individual consultation on writing assignments, continuing study of professional news and feature writing, observation of modern newspaper processing.

MEDIA 156 Dr. R. Wallace
Radio Journalism 3 credits
(Prerequisites: Media 151 and either Media 131 or 132) Newswriting and reporting, interviewing and investigating for documentary purposes will comprise the major areas of study. Lab fee.

MEDIA 157 Prof. Pearce
Television Journalism 3 credits
Broadcast journalism skills are refined through assignments and classroom critiques. Production techniques, including film and tape editing, are discussed and the student is introduced to the techniques of assembling newsprograms. (GE AREA III)

MEDIA 158 Prof. Pearce
Advanced Television Journalism 3 credits
(Prerequisite: Media 157) Network and local station documentary broadcasts and a "hands-on" opportunity to work with film and tape in the production of minidocumentaries and full-length programs. Some course projects may be accepted for broadcast by a local television station. Lab fee.

MEDIA 161 Prof. C. Wallace
Advertising 3 credits
Advertising as a persuasive tool. Major topic areas: research, concept and design, media selection and evaluation.

MEDIA 162 Prof. C. Wallace
Advertising Practicum 3 credits
An in-depth continuation of Media 161, this practicum requires that students constitute a full-

service advertising agency. The agency will provide a variety of clients with complete advertising service, from campaign creation to implementation. Account executives for each project will be approved by the professor.

MEDIA 163 Prof. Warner
Political Advertising 3 credits
The process of advertising as it applies to political campaigning is analyzed. Particular attention to the use of newspapers, radio and television. Students put together a complete advertising campaign as a final project.

MEDIA 165 Prof. Warner
Political Rhetoric 3 credits
An investigation into the use and influence of rhetoric in modern politics. Case studies chosen from political leaders of the twentieth century in the United States and in Europe.

MEDIA 171 M. Costello
Public Relations 3 credits
(Prerequisite: Media 151) Introduction to the field of organizational public relations. Through the case method, the student obtains an overview of the public relations profession and an appreciation of policy-making decisions.

MEDIA 172 M. Costello
Promotional Writing 3 credits
A study of the writing process employed in advertising and public relations for the print and broadcast media. Student writing assignments are critiqued in class on a regular basis.

MEDIA 194 Fr Tome
The First Amendment and the Press 3 credits
This course begins with an historical analysis of the First Amendment: what inspired it and why it was included as the first of the Bill of Rights. It then provides a philosophical justification for the legal guarantee of freedom of speech; and traces the limits of this right which have been set by the Supreme Court since the landmark decision of Sullivan vs. The New York Times in 1964. (GE AREA III)

MEDIA 198 Dr. R. Wallace
Media Internships 3 credits
Junior or Senior majors are encouraged to engage in an internship related to their media sequence. Prior consultation and approval from the Director of Internships is required. Classroom work will supplement the off-campus experience.

COMMUNICATION ELECTIVES FOR AREA III OF GENERAL EDUCATION PROGRAM

Elementary, Intermediate and Advanced Languages
CMPS. 20, 21, and 25.
EDUC. 103-104, 107
PHIL. 28 Logic
ART 185 Painting Techniques
ART 186 Drawing
ENGL. 7 Writing Center
ENGL. 9 Scientific Writing
ENGL. 124 Creative Writing
ENGL. 125 Strategies for Teaching Writing
ENGL. 127 Teaching Modern Grammars
COMM. 2 Oral Communication
COMM. 103 Logical and Rhetorical Analysis
MEDIA 111 Advanced Composition
MEDIA 112 Argumentation and Debate
MEDIA 141 Television Production
MEDIA 142 Educational Television
MEDIA 150 Broadcasting
MEDIA 151 Intro. to Journalism
MEDIA 152 Advanced Print Journalism
MEDIA 157 Television Journalism

COMPUTER SCIENCE

DR BEIDLER, *Chairperson*

The University of Scranton's bachelor of science program in computer science dates to 1970 — one of the oldest in the Commonwealth. The strength of the program is indicated by the quarter million dollar grant received from the National Science Foundation for academic computer-based problem solving as well as by the role of the departmental chairman, Dr. Beidler, as chairman of the Task Force on Small College Computing for the Association for Computing Machinery. The curriculum below is consequently state of the art.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	CMPS 24-25	Introduction I-II	3	3
COGNATE	Math. 10-11	Discrete Math I-II	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	CMPS 100-110	Assembly Lang. Prog. — Data Structures	3	3
COGNATE	Math. 14-21	Calculus I-II	4	4
GE AREA II	Pol. Sci 5-6*	Intro. to Public Administration*	3	3
GE AREA III	Engl 9	Scientific Writing	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS	Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			17	17
		JUNIOR		
MAJOR	CMPS 101-150	Operating Systems — Prog. Langs.	3	3
MAJOR	CMPS 126	File Structures & COBOL	3	
MAJOR	CMPS	Electives	3	6
COGNATE	Phys. 9-10 or 11-12 or Acc. 1-2		4/3	4/3
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA V	Phil 110	Ethics	3	
GE FREE	Intd	Interdisciplinary Elective		3
			19/18	19/18
		SENIOR		
MAJOR	CMPS 120	Computer Projects	3	
MAJOR	CMPS	Electives	3	3
COGNATE	Math 102-104	Probability — Statistics	3	3
COGNATE	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Electives	3	3
GE FREE	Elective	Elective		3
			18	15

TOTAL: 135-137 credits

*General education recommendation: for AREA III, Comm. 2 (Oral Communication Center) and English 7 (Writing Center) are recommended except for students with Advanced Placement in English or extensive high school experience in speech and writing. Public Administration I-II recommended as Social Science elective.

ALTERNATE TRACKS

1 **Computer Science:** MAJOR — Junior and senior year electives must include CMPS 133 or 145; CMPS 130 or 140; electives must be chosen from CMPS 123, 125, 130, 133, 136, 140, 145, 146, and 160.
COGNATE — Junior year elective should be one of the physics course sequences; senior year elective should be a science or mathematics course.

2. **Computer Engineering:** MAJOR — Junior and senior year electives must include CMPS 145, CMPS 130 or CMPS 140; electives must be chosen from CMPS 123, 125, 130, 133, 136, 140, 146, and 160.
COGNATE — Phys. 11, 12; EE 24, 106, 107, 110.

3. **Information Science:** MAJOR — Junior year electives include CMPS 127, 136, 138. Senior year electives include CMPS 145.
COGNATE — Junior year elective, Acc 1-2; senior year elective in business course sequence.

4. **Personal:** For an individualized, personal track, the major and cognate requirements are usually established during the spring semester of the sophomore year for the student by a committee composed of at least two members of the computer science faculty as appointed by the chair.

CMPS. 1 Staff
Computer Literacy 3 credits
This course is designed for non-science majors who wish to learn to use computing in several ways that do not involve programming. Students here learn the fundamentals of using an editor, text processor, electronic spreadsheet, statistical and graphics software. Lab Fee. (GE AREA I).

CMPS. 20 Staff
FORTRAN 77 3 credits
An introduction to programming using FORTRAN 77. Applications from mathematics and the natural sciences are emphasized Lab Fee.

CMPS. 21 Staff
Computing for Business and Social Sciences 3 credits
An introduction to computing emphasizing problem solving concepts and the use of software packages. Emphasis is on the use of word processing, electronic spreadsheets, statistical packages, graphics, and database software, as well as developing a concern for societal issues. Lab. fee.

CMPS. 24 Staff
Computer Science I 3 credits
An introduction to programming concepts and methodology using the programming language PASCAL. The course emphasizes a structured programming approach. Topics included are problem analysis, modularization, top-down design, and the elements of the programming language, PASCAL. Lab Fee.

CMPS. 25 Staff
Computer Science II 3 credits
A sequel to CMPS 24. It continues the development of structured programming concepts using the programming language Modula-2. The course follows the guidelines for CS2 as developed by the ACM. Lab fee.

CMPS. 100 Dr. Kumar
Assembly Language Programming 3 credits
An introduction to assembler programming. Among the topics discussed will be machine organization, the representation of data, the assembler, input-output routines and the use of macros. Pre: CMPS. 25. Lab Fee.

CMPS. 101 Prof. Meinke
Operating Systems 3 credits
The analysis and design of computer systems including debugging, operating system design, and the implementation of multiprogramming. Prerequisite: CMPS. 100 and 110.

CMPS. 110 Prof. Jackowitz
Data Structures 3 credits
The representation and transformation of information. This course stresses the interrelation between data structure and program structure. Included will be an elementary discussion of compiler structure. Prerequisite: CMPS. 25; CMPS. 100 preferred.

CMPS. 120 Staff
Computer Projects 3 credits
In this course students present computer projects of their choice to be evaluated by the instructor and their fellow students. Seniors only.

CMPS. 123 Prof. Cicilioni
Operations Research 3 credits
Introduction to the basic mathematical modeling and simulation techniques used in the business environment. Use of basic operations-research techniques including linear and dynamic programming, simulation, queuing theory. Pre: CMPS 25 and Math 4 or 14.

CMPS. 125 Staff
Artificial Intelligence 3 credits
Problem solving under uncertainty, Heuristic Programming Techniques, Tree speed-up techniques, analysis of chess and other non-well determined games, learning mechanisms. Pre: CMPS 110.

CMPS. 126 Staff
File Processing with COBOL 3 credits
File processing applications are discussed and COBOL is used as an implementational tool. Topics include: Sequential files, merging, updating, random files, ISAM, VSAM, and COBOL features to support file processing. Pre: CMPS 25. Lab Fee.

CMPS. 127 Prof. Taylor
Information Systems 3 credits
Introduction to concepts and practices of information processing. Computerized system requirements and techniques in providing appropriate decision-making information to management. Pre: CMPS 20/21 or CMPS 24. Lab Fee.

CMPS. 130 Staff
Numerical Analysis 3 credits
A survey of computer-oriented techniques for integration, differentiation, matrix computation, solution of simultaneous equations, and analysis of errors. Prerequisite: CMPS 25, Math 4 or 14.

CMPS. 133 Dr. Beidler
Computer Graphics 3 credits
Introduction to equipment and techniques used to generate graphical representations by computer. Description and use of vector-refresh, vector-storage, and raster-scan graphics plotter and CRT pseudographics. Prerequisite: Math 13 and CMPS. 110.

CMPS. 136 Prof. Plonsky
Advanced COBOL 3 credits
Continuation of CMPS. 126 in COBOL programming language to data processing problems. Special procedure verbs, Report-Writer feature, magnetic tape, direct access storage devices. Pre: CMPS. 126. Lab Fee.

CMPS. 138 Prof. Taylor
Business Systems Analysis 3 credits
(Prerequisite: CMPS. 127) A study of the development of systems analysis techniques including current methods which emphasize a structured programming approach.

CMPS. 140 Staff
Discrete Structures 3 credits
Foundations of computer science taken from logic, recursive functions theory, turing machines, automata theory, formal language theory. Pre: CMPS. 110.

CMPS. 145 Prof. Meinke
Computer Architecture 3 credits
Processor/memory/switch and instruction set processor/register transfer level; digital logic design. Prerequisite: CMPS. 100 & 110.

CMPS. 150 Prof. Jackowitz
Programming Languages 3 credits
Practical and theoretical aspects of programming languages, compilers, and compiler writing. Prerequisite: CMPS. 101.

CMPS. 160 Dr. Beidler
Formal Language Theory 3 credits
Development of a precise notion of computability and relationship to turing computable and recursive functions. Pre: CMPS. 140.

CRIMINAL JUSTICE

DR. RIELLY, *Chairperson*

The BS Degree program in Criminal Justice has the following objectives: 1. to prepare students for careers in law enforcement at the local, state or federal levels (FBI, Departments of Defense, Treasury, Justice); 2. to prepare students for careers in the field of correction and rehabilitation: parole, prisons, juvenile delinquency, etc.; 3. to provide students with academic preparation for advanced study in law, criminology, public administration and related fields. The Criminal Justice major is administered by the Department of Sociology/Criminal Justice, which also administers the Sociology and Gerontology degree programs.

An Advisory Board of Community leaders working in the field of law enforcement and criminal justice has been established to work with University officials and faculty in the areas of curriculum and internships.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Soc. 21 — CJ 20	Principles of Sociology — Intro. to Criminal Justice	3	3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	S/CJ 123-CJ 112	Law and Society — Criminal Research	3	3
MAJOR	S/CJ 103-113	Criminology — Juvenile Delinquency	3	3
COGNATE	Pol. Sci. 101	American National Government	3	
COGNATE	Psych. 25	Human Behavior		3
GE AREA III	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	CJ Elec.	Criminal Justice Electives	3	3
COGNATE	Pol. Sci. Elec.	Political Science Electives	3	3
COGNATE	Soc. Sci. Elec.	Social Science Electives	3	3
GE AREA I	Acc. 3-4*	Financial — Managerial Accounting	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Elective	Elective	3	
			18	15
		SENIOR		
MAJOR	CJ Elec.	Criminal Justice Electives	3	3
MAJOR	CJ 198-99-Elec.	Practicum/Electives	3	3
COGNATE	Soc. Sci. Elec.	Social Science Elective		3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Elective-Intd.	Elective — Interdisciplinary	3	3
			15	15

TOTAL: 127 credits

*Departmental Recommendation

General Education Recommendation:

In GE AREA I, the department recommends 12 credits of accounting for those contemplating FBI service; otherwise, C/LE 151, Forensic Chemistry. In GE AREA III, CMPS. 21 is highly recommended. In GE AREA IV, the department recommends Hist. 1-2, History of the U.S.; H/PS 124-25, American Political and Social Thought; Engl. 112, Black Literature. In GE AREA V, T/RS 163, Church and Contemporary Social Issues

In the COGNATE, the department recommends Pol. Sci. 105, State Government; Pol. Sci. 106, Local Government; Pol. Sci. 127, American Intergovernmental Relations; Psych. 145, Abnormal Psychology; Soc. 106, Community Organization; Soc. 107, Child Welfare; Soc. 111, Urban Sociology; Soc. 114, American Minority Groups; Soc. 148, Social Psychology.

MINOR. A minor in Criminal Justice will require eighteen credits. There are three required courses: Soc. 21: Principles of Sociology; CJ 20: Introduction to Criminal Justice; and S/CJ 103: Criminology. The following elective courses are strongly recommended by the department in the criminal justice sequence: CJ 112: Criminological Research; S/CJ 113: Juvenile Delinquency; S/CJ 126: Law and Society; and CJ 126: Criminal Law.

CJ. 20 Profs.Friedrichs, Baker
Introduction to Criminal Justice 3 credits
A foundation course examining problems in the study of crime and criminal justice, basic elements of criminal law and constitutional rights, and the functions of, as well as the relationship between, major components of the criminal justice system; agencies and role of law enforcement; prosecution; the judicial process; and corrections.

S/CJ. 103 Prof. Friedrichs, Dr. Rielly
Criminology 3 credits
Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control and treatment programs.

S/CJ. 104 Prof. Friedrichs
Victimology 3 credits
An examination of the causes and consequences of crime victimization. The recent emergence of the study of the victim, the types and circumstances of victimization, and the nature of the criminal justice system's response to crime victims are considered, along with the ethical and practical dimensions of crime victimization.

CJ. 112 Dr. Rielly
Criminological Research 3 credits
Survey of methods and techniques for achieving interpretable results in research in the criminal justice field; research design; data collection.

CJ. 113 Dr. Rielly, Dr. Talamini
Juvenile Delinquency 3 credits
Nature and extent of delinquency: competing explanatory models and theories; evaluation of prevention, control, and treatment programs.

S/CJ. 115 Dr. Rielly, Prof. Baker
Organized Crime Patterns 3 credits
Historical survey of organized crime in America; areas of influence; remedial practices and control.

S/CJ. 116 Prof. Friedrichs
Crime, Deviance & Respectability 3 credits
An analysis of illegal and deviant patterns of behavior in respectable middle and upper class circles. Crime is examined in the context of legitimate occupations, the activities of major businesses and corporations, and the policies and practices of government officials. Patterns of public response and changing legal trends are studied.

S/CJ. 117 Prof. Friedrichs
Sociology of Deviance 3 credits
Critical examination of theories and empirical studies of social deviance, focusing upon the formulation and application of deviant labels, organizations relating to deviance, and deviant behavioral patterns. Special attention given to non-criminal forms of deviance.

S/CJ. 122 Staff
Special Topics in Criminal Justice 3 credits
Courses designed to meet specific needs of groups of students or courses offered on trial basis to determine the value of placing them into regular curriculum.

S/CJ. 123 Prof. Friedrichs, Dr. Talamini
Law and Society 3 credits
The relationship between law and society, or the interaction of legal and social variables. Examines jurisprudential and social theories of law; types of legal systems; ideology and legitimacy of law; development of law; the role of the legal profession; legal behavior and decision-making; and law and social change.

CJ. 124 Prof. Baker
Principles of Criminal Investigation and Identification 3 credits
Course designed to teach investigators in-depth techniques in the handling and analysis of physical evidence; interviewing and interrogation; the preservation and admission of evidence.

CJ. 125 Atty. Cimini
Criminal Justice Process 3 credits
A study of the law of criminal procedure, treating

investigation and police practices, preliminary proceedings, and trial, as they relate to the development and structure of the American criminal justice system and as they affect offenders.

CJ. 126 Atty. Cimini
Criminal Law 3 credits
A study of substantive criminal law in view of its historical foundations, purpose, functions and limits; of crime and defenses generally; and of the elements which constitute certain specific crimes under state and federal statutes.

S/CJ. 127 Staff
Probation and Parole 3 credits
Examination of community treatment in the correctional process; contemporary usage of presentence investigation, selection, supervision, release of probationers and parolees.

S/CJ. 128 Atty. Cimini, Dr. Reilly
Penology: The American Correctional System 3 credits
Analysis and evaluation of contemporary correctional systems; theories of punishment; discussion of recent research concerning the correctional institution and the various field services; the history of corrections in Pennsylvania.

CJ. 129 Prof. Baker
Criminal Justice Management 3 credits
Basic principles and practices of administration and their application to law enforcement. Relationship of theoretical administrative concepts and practical police problems.

S/CJ. 132 Prof. Friedrichs
The American Court System 3 credits
The court as a key component of the criminal justice system is examined. Philosophical, historical, comparative and typological perspectives are reviewed; the organization, structure and procedures of the court are analyzed, and roles of the major courtroom participants are explored. Court administration, planning and reform

S/CJ. 133 Atty. Cimini
Principles of Evidence 3 credits
An examination of the law of evidence as it pertains to the trial of a criminal case. A discussion of the common law, pertinent statutes, judicial opinions, and rules such as the federal rules of evidence, as these relate to such concepts as direct and circumstantial evidence; opinion testimony, experts and exhibits; competence, relevance and materiality; privileges, hearsay and its exceptions.

S/CJ. 134 Atty. Cimini
Trial, Jury and Counsel 3 credits
A consideration of the rights guaranteed by the Sixth Amendment to the Constitution of the United States, surveying constitutional provisions, statutes, court rules and cases concerning the right of a criminal defendant to a speedy and public trial, to trial by jury, and to the assistance of counsel.

CJ. 140 Prof. Baker
Crime Prevention 3 credits
Analyzes the past and present roles of non-governmental actors in the justice process focusing on their legal and sociological implications; private security operations, investigative methods, management and supervision.

CJ. 142 Prof. Baker
Public Safety Administration 3 credits
An overview of the safety field — its philosophy, disciplines and research. An examination of the causes and extent of accidents. The principles and methods of prevention will be examined.

S/CJ. 145 Atty. Cimini
Civil Liability 3 credits
An examination of the law enforcement officer or employee as a defendant in a civil suit arising from the scope of his employment. Liability based upon rights statutes, is examined, along with a consideration of the typical defenses.

S/CJ. 146 Prof. Baker
Introduction to Recreation and Leisure 3 credits
An introductory course designed to give students a broad overview of the recreation profession. The importance of recreation and leisure will be discussed. The principal theories, concepts and problems will be examined

S/CJ. 151 Dr. Thoman, Dr. Appleton
Forensic Chemistry 3 credits
A study of the rules of evidence and the position of the expert and scientific witness in law, followed by a review of the use of scientific, and particularly chemical, evidence in various phases of the investigation and trial of criminal actions. No prerequisite.

CJ. 191-192 Staff
Independent Study in Law Enforcement 3 credits
Directed projects and surveys in criminal justice, law enforcement, and corrections designed to give the student academic flexibility. Prerequisite: consent of the Chairman and the Instructor.

CJ. 198-199 Prof. Baker, Dr. Rielly
Field Practicum Experience 3 credits
Supervised field work in an approved criminal justice setting taken preferably in junior and senior year.

EDUCATION

DR. KIMBLE, *Chairperson*

PROF. CURTIS, *Director of Student Teaching*

Through its various programs, the Department of Education endeavors to contribute to the improvement of education by preparing informed, inquiring, and skilled professionals for positions in the educational community. More specifically, the Department aims to provide persons with a breadth and depth of knowledge and understanding in their specialized area of professional practice and to provide training to insure competence in the specific area of functioning. To this end, individual program competencies have been developed. Additionally the Department endeavors to offer opportunities for continued professional growth to practicing educators, to assist in the educational growth and development of the community served by the University, and to foster the advancement of knowledge through research in education.

The Department of Education offers teacher education concentrations leading to certification in:

Biology	General Science	Physics
Chemistry	German	Physics-Mathematics
Communications	Latin	Social Studies
English	Mathematics	Spanish
French		

The education program is accredited by the Pennsylvania Department of Education and the National Council for Accreditation of Teacher Education. These accreditations and reciprocity agreements between Pennsylvania and selected states assure that courses taken will be considered for certification in most states.

Students will be accepted for teacher education only with the approval of the Department of Education. Pre-entrance interviews may be required.

A student may enter the education program either as a major in education or in his/her subject area. However, in both cases the student must be approved by the Department and follow the prescribed courses if he/she desires certification. Specific requirements for each subject matter concentration are available from the Education Department. Students will be given a curriculum guide upon approval of their entrance into the program.

Double majors between a subject area and education may be arranged in the case of exceptional students. These must be approved by both departments involved and by the dean. A specific program will be designed in each individual case. Double certification programs may also be arranged to improve the student's employment potential.

The Requirements and Curriculum Guide provides the rules and regulations which must be followed to remain a candidate for certification and graduation.

EDUC. 21 Staff
The Foundations of Education 3 credits
The characteristics of the public school system in the United States, the role of education in contemporary society, and current issues related to education are presented. (GE Area II)

EDUC. 22 Staff
Educational Psychology 3 credits
The psychological basis of teaching strategies, classroom environment, learning, motivation, reinforcement, and evaluation will be taught. (GE Area II)

EDUC. 23 Staff
Sophomore Field Experience 1 credit
(Prerequisite: Education 22) This experience will be closely associated with Education 21 and 22. Projects will be assigned to be carried out in the secondary schools through observation and contact.

EDUC. 24 Staff
Junior Field Experience 1 credit
(Prerequisite: Education 103) Close association with the Education 103 and 104 courses will be maintained with an emphasis on studying teaching techniques and with involvement in teacher activities in area secondary schools.

EDUCATION CONCENTRATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Teaching Major	Introductory Courses	3	3
COGNATE	Educ. 21	Foundations of Education		3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Psych. 23-Elec.	Fundamentals of Psych.* — Psych. Elec.*	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Teaching Major	Required or Elective Courses	6	6
COGNATE	Educ. 22-23	Education Psych.-Sophomore Experience	3	1
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Soc. 21-22	Basic Sociology-Social Problems*	3	3
GE FREE	Elective	Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	17
		JUNIOR		
MAJOR	Teaching Major	Required or Elective Courses	6	6
COGNATE	Educ. 103-104	General Methods & Planning — Subject Method	3	3
COGNATE	Educ. 24-107	Junior Experience — Reading in Secondary School	1	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	Educ. 106	Philosophy of Education*		3
GE FREE	Intd.	Interdisciplinary Elective	3	
			19	18
		SENIOR		
MAJOR	Teaching Major	Electives		6
COGNATE	Educ. 105	Student Teaching	9	
COGNATE	Educ. 113	Classroom Management	2	
COGNATE	Educ. 111	Professional Seminar	1	
GE AREA III	Communications	Elective		3
GE AREA V	Phil.-T/RS	Philosophy and/or Theology Electives		6
GE FREE	Electives	Electives		3
			12	18

TOTAL: 132 credits

*Departmental recommendations
Comm. 2 and English 7 are recommended
N.B. Students in the teaching areas of math and science will take humanities (GE AREA IV) courses in place of Natural Science/Quantitative (AREA I) courses where noted above.

EDUC. 103 Prof.Curtis
General Methods and Planning 3 credits
(Prerequisite: Education 22) Methodology for setting direction in the classroom, creating a learning situation, developing the content, reinforcing and evaluating will be covered. Students will be involved with developing plans for teaching. (GE Area III)

EDUC. 104 Staff
Specific Subject Methods 3 credits
(Prerequisite: Education 103) Utilizing knowledge of planning and teaching generally, students will be guided in the analysis of specific content and techniques for teaching that content. They will demonstrate their ability to carry out plans in "micro" teaching experiences. (GE Area III)

EDUC. 105 Staff
Student Teaching 9 credits
(Prerequisites: Education 103 and 104) Involvement in actual teaching for ten weeks in an area secondary school under the supervision of classroom teachers and University supervisors. Admission to student teaching by permission of the Education Department only.

EDUC. 106 Staff
Philosophy of Education 3 credits
An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man and society. (Recommended as GE Area V elective for education majors)

EDUC. 107 Prof. Williams
Reading in the Secondary School 3 credits
This course is the study of the reading process with emphasis placed on understandings and skills needed by secondary school students in their subject fields.

EDUC. 110 Prof. Curtis
Values Development 3 credits
A course designed to acquaint the student with theories relating to value development: what values are, and how they are formed. The affective process, value systems, activities for value development suitable for use by parents, teachers and others involved in human relations will be covered. The emphasis will be on the adolescent. Open to all majors. (GE Area II)

EDUC. 111 Staff
Professional Seminar 1 credit
Discussion of topics related to teaching such as professional organizations, employment, and legal issues. Taken concurrently with Education 105.

EDUC. 112 Dr. Conover
Introduction to Geography 3 credits
A course designed to introduce the major concepts and skills of geography. Major land forms, bodies of water, climate, and the relation of land to human endeavor will be covered. Open to education and non-education majors. (GE Area II elective)

EDUC. 113 Staff
Classroom Management and Discipline 2 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. (GE Area II)

EDUC. 190 Staff
Special Topics in Education 1-3 credits
A series of courses dealing with specific educational issues, theories, ideologies, skills, methods, or other designated topics for individual or group study. Course is offered on student demand. (GE Area dependent on topic)

ENGINEERING

DR. DiSTEFANO, *Advisor*

The University provides a pre-engineering program which introduces the student to the highly technical training necessary for all phases of the engineering profession. This is a two-year course which enables the student to transfer to an engineering school to complete his degree work.

Of special importance is the University of Scranton's association with the Cooperative Engineering Program at the University of Detroit, and its programs in chemical, civil, electrical, environmental, and mechanical engineering. For the student who has completed the pre-engineering curriculum at the University of Scranton, the Detroit three-year cooperative program offers alternate semesters of formal instruction and work experience in industry. A direct transfer program is available with Widener College, which may be either a Co-op program beginning in the summer preceding the Junior Year or a regular two-year program.

Other engineering schools into which University of Scranton students transfer include Lehigh, Bucknell, Penn State and Drexel among others.

In addition to the valuable experience gained from industry, many students have been able to pay the cost of their tuition from the remuneration received for their work. This amounts to a substantial equivalent scholarship grant.

See also the Electronics Engineering Program offered in the Physics Department.

ENGINEERING TRANSFER PROGRAM

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Phys. 11-12	Elements of Physics I-II	4	4
COGNATE	CMPS 20	Computer Science	3	
COGNATE	Math. 14-21	Analysis I-II	4	4
GE AREA III	Communications	Elective*	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
GE AREA	Elective	Humanities or Social Science Elective		3
PHYS EDUC	Ph. Ed 1-2	Basic Physical Education	1	
			18	17
		SOPHOMORE		
MAJOR	EE 24	Circuit Analysis		4
MAJOR	Engr. 21-23	Statics — Solid State Materials	3	3
COGNATE	Phys. 21	Elements of Modern Physics	4	
COGNATE	Math. 22-101	Analysis III — Diff. Equations	4	4
COGNATE	Chem. 11-12	General and Analytical Chemistry	3	3
GE FREE	Elective	Electives	3	3
			17	17

TOTAL: 73 credits

*The Department recommends Engl 7, Composition, of if exempt, Engl 9, Scientific Writing.

ENGLISH

DR. McINERNEY, *Chairperson*

The department provides instruction in literature, writing, and analysis for all students in the University. Literature courses may be chosen for the humanities area (IV) or as cognate courses for other majors.

In the basic English major program of 36 credits, 21 are specified below; the student selects the remaining 15 hours as the "specific difference" which individualizes the major program, depending on the student's vocational and intellectual interest: law school, journalism, business, graduate school in English, etc.

After freshman year, English majors may propose an alternate major program for the chairman's approval, and they may obtain from the chairman written guides or "tracks" of electives designed to prepare students for various careers, e.g., students interested in theatre may follow special sequences which focus on Directing and Playwrighting.

The department also offers a 5-year AB-MA program.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Engl. 11-101	English Inquiry — British Literature	3	3
COGNATE	Electives	Cognate Inquiry	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Engl. 102-103	British Literature	3	3
COGNATE	Electives	Foreign Language or other Cognate	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS	Theology/Religious Studies Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Engl. 104-105 — Elec.	Required and Elective Courses	6	6
COGNATE	Electives	History or other cognates	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Intd.	Interdisciplinary Elective		3
			15	18
		SENIOR		
MAJOR	English 106-Elec.	Required and Elective Courses	6	6
COGNATE	Electives	Foreign Literature or other Cognates	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

For Freshman COGNATE sequence, History 3-4 or a foreign language is recommended.

MINOR. The English Department is happy to offer a minor to those students majoring in other disciplines who care to develop an interest in practically any phase of British and/or American literature. The department suggests that, with advice, the individual student cluster his or her choices around three upper-division courses within any specific period (American Literature since the Civil War, e.g.), or any literary genre or category (the Drama, e.g.). Students may also select three advanced writing courses. There are two required courses: 1.) English 7 (Written Communication) and 2.) English 11 or 25 or 26 (which cover a broad range, including literature's nature, value, aims, elements and techniques). Those two courses, plus the three electives mentioned above would generate 15 credits, the minimum number needed for a minor.

ENGL. 7 Staff
Written Communication 3 credits
Proceeding from the assumption that the ability to write effective prose is one of the hallmarks of students educated in the liberal arts tradition, this course facilitates the realization of this ideal in accordance with individual potential. More specifically, this course explores the interaction of thesis, appropriate expression, and structure apparent in any well-written paper. Recognized stylistic exemplars are accorded careful analytical consideration.

ENGL. 9 Dr. Fraustino
Scientific Writing 3 credits
A course in scientific or technical writing designed to help students improve their writing skills in preparation for their professions. Specialized training is offered in writing of proposals, reports, instructions, letters, abstracts, resumes, etc.

ENGL. 11 Dr. Casey
English Inquiry 3 credits
An exploration of literature and of literary criticism. The approach is inductive; the aim is a greater understanding of literature, and a mastery of some techniques of literary scholarship.

ENGL. 12 Dr. McInerney
Writing for the Law 3 credits
This course aims to help the student develop the writing skills that will be of particular value to prospective lawyers. Readings, exercises, and assignments stress precision and conciseness as well as careful argument. The course should also be valuable to any student who wants to improve his/her analytical ability and expressive capacity. Prerequisite: Engl. 7.

ENGL. 13 Dr. Murray
Practical Criticism 3 credits
A writing-centered course in which students read carefully and then write critiques of challenging pieces of poetry, worthwhile plays, and well-crafted short stories. One novel will also be critiqued as a term-ending paper. Prerequisite: Engl. 7 or equivalent.

The following literature courses (English 21 through 27) are designed as cognate or general education (humanities) courses for students majoring in fields OTHER than English. English majors are not permitted to fulfill major requirements with these courses.

ENGL. 21 Staff
English Literature 450-1800 3 credits
A study of English literature from *Beowulf* to the beginnings of the romantic movement. The emphasis is textual rather than historical.

ENGL. 22 Staff
English Literature
1800 to the Present Day 3 credits
A study of English literature from romantic period to the middle of the twentieth century. The emphasis again is textual and critical.

ENGL. 23 Staff
American Literature through the
Romantic Period 3 credits
A study of major figures in America's literature from the colonial period through the age of transcendentalism including such figures as Edward Taylor, Jonathan Edwards, Hawthorne, Thoreau, Emerson, Melville, and Whitman.

ENGL. 24 Staff
American Literature to the
Present Day 3 credits
The study of major figures in America's literature from the beginnings of realism to today's literature of revolt. Included will be such disparate authors as Twain, Dickinson, Dreiser, Lewis, Hemingway, Fitzgerald, Ginsberg.

ENGL. 25 Staff
Introduction to Fiction 3 credits
An exploration of the nature of prose fiction, its elements and techniques. The emphasis is critical rather than historical. The range of works and the specific selections may vary with the individual instructor.

ENGL. 26 Staff
Introduction to Poetry 3 credits
An exploration of the nature of poetry, its value, aims, and techniques. The emphasis will be critical rather than historical. The range of poems and the specific selections will be the choice of the individual instructor.

ENGL. 27 Staff
Introduction to Drama 3 credits
An exploration of the nature of drama, its types, techniques, and conventions. The emphasis will be critical rather than historical.

UPPER DIVISION COURSES

ENGL. 101 Dr. Beal
British Literature: Medieval and Renaissance 3 credits
A detailed study of representative works and authors from *Beowulf* to the Restoration. Though the emphasis will be on an intensive study of major texts, some consideration will be given to minor writers and their times.

ENGL. 102 Dr. Mitchell
British Literature: The Restoration and Eighteenth Century 3 credits
Study in depth of the major works of such authors as Dryden, Pope, Swift, Boswell, and Johnson, among others. Due attention will be given to critical analysis, literary research, and historical, social, and political background.

ENGL. 103 Drs. Casey and Fraustino
British Literature: Romantic and Victorian Periods 3 credits
A study of major literary works in nineteenth-century England: poetry, novels and non-fictional prose. The emphasis is threefold: critical analysis; literary history; social, intellectual and political background.

ENGL. 104 Fr. Joseph Quinn, Dr. Gougeon
American Literature to 1865 3 credits
An in-depth study of a select group of major American authors from the Colonial Period to the Civil War. Included are Bradford, Franklin, Irving, and Poe. Consideration given to the historical and cultural milieu and development of major American themes and attitudes.

ENGL. 105 Fr. J. J. Quinn
Modern British Literature 3 credits
Selected modern and postmodern English poets, playwrights, and fiction writers: Hopkins, Eliot, Hughes, Auden, Larkin, Spender, Osborne, Stoppard, Pinter, Greene, Waugh, Read, Lodge, Amis, Spark, McEwan, and Chatwin.

ENGL. 106 Drs. Whittaker & Gougeon
American Literature, 1865-Present 3 credits
Study of a select group of major American authors from the Civil War to the present. Included are Twain, Crane, Fitzgerald, and Vonnegut. The historical and cultural milieu and the development of major American themes and attitudes.

ENGL. 107 Staff
Introduction to Theatre 3 credits
An exploration of the various artists and managers in theatre; such as actors, playwrights, directors, and set, lighting, and costume designers. The various "schools" of acting, designing, etc. are studied from an historical and practical viewpoint. Students work on a major university production as a course requirement.

ENGL. 108 Staff
Introduction to Acting 3 credits
The basic theories of acting are explored in conjunction with study of selected scripts. The course does not stress "character development," but rather how to intelligently approach the script with basic questions fundamental to effective acting.

ENGL. 109 Staff
Intermediate Acting 3 credits
"Character" development is stressed in this course. The student learns how to approach characters on the page and bring them to life on the stage. Selected plays and characters are assigned for the student to master.

ENGL. 110 Staff
Advanced Acting 3 credits
The actor now demonstrates mastery of fundamentals and character development in scene studies from plays selected to prove his ability "to enlighten" the script with insight and skill. Performance level quality is expected; the final exam (in part) will be "staged" scenes presented to an invited audience.

ENGL. 114 Drs. Wallace & McInerney
History of Cinema 3 credits
A study of the historical development of motion pictures. Practitioners in America and throughout the world are treated in this concise history of cinema. Film screening fee. (GE Area IV)

ENGL. 115 Drs. Wallace & McInerney
The Art of Cinema 3 credits
The study of the artists, technicians and businessmen who make films. Taped interviews of internationally famous film makers, as well as an analytic scrutiny of modern films, develop students' intelligent, active participation in the major art form in modern culture. Film screening fee. (GE Area IV)

ENGL. 116 Drs. McInerney & Wallace
Film Genres 3 credits
A study of the popular film genres (i.e., the western, the thriller, the musical, the historical epic, the woman's picture as it developed and changed in the U.S. and abroad.) Film adaptations of literature: plays, novels, stories. Film screening fee. (GE Area IV)

ENGL. 117 Drs. Wallace & McInerney
Film Criticism 3 credits
A study of the grammar, poetics, rhetoric, and aesthetic of film critics constitute the heart of this course. Film screening fee. (GE AREA IV)

ENGL. 118 Dr. Zahler
Drama Practicum 3 credits
Work on one of the major aspects of producing a play: acting, costuming, set construction, lighting, publicity, and box office management. Prerequisite: Engl. 27 or advanced drama course (e.g., Engl. 131, 132, 133, 149, 150) or Engl. 11.

ENGL. 121 Staff
Scriptwriting 3 credits
Introduction to the film and television format for dramatic productions of varying lengths. Documentaries are also studied. Students must master not only technique but explore development of plot and character. Four major assignments and several short projects are required. Prerequisite: Engl. 7 or equivalent.

ENGL. 122 Dr. Zahler
Play Writing 3 credits
Course is designed to teach student craft and technique of writing a play. The student will explore his own abilities through play writing and will be responsible for writing a full one-act play or one act of a two or three act play. (GE Area III or IV)

ENGL. 124 Prof. Hill
Poetry Writing
Theory and practice of writing poetry with attention to modern and contemporary tradition and criticism. Opportunity for sustained, serious response to student work and practical advice on markets, publishing procedures, etc. The course employs a workshop format and encourages serious reading and discussion of poetry.

ENGL. 125 Dr. Rakauskas
Written Communication; Strategies for Teaching Writing 3 credits
Those elements of the communication process peculiar to developing writing skills with emphasis placed on writing as a process. Student is involved in laboratory activities: each class member experiences a "mini-teaching responsibility" by functioning as laboratory assistant for the University's writing center, by planning assignments, generating writing situations, and responding as an audience. (GE Area III)

ENGL. 126 Dr. Whittaker
Short-Story Writing
Designed to increase students' skills in writing short prose fiction, this course augments frequent practice in the genre with attention both to theories of short story composition and to diverse examples. In a workshop atmosphere, students will read and discuss one another's work as well as fiction by well known authors.

ENGL. 127 Dr. Rakauskas
Teaching Modern Grammars 3 credits
This course is designed to provide an understanding of the English language and its grammar, based upon recent linguistic analysis of the language, and to assist the future teacher in his understanding of transformational/generative grammar and its place in the curriculum. Techniques for teaching these new grammars, and laboratory teaching experience in the freshman writing clinic will be presented. Students seeking certification as secondary school English teachers should also be advised that the usual teacher of Engl. 127, as well as 125, Dr. Wm. Rakauskas, supervises student teachers for the department. (GE Area III)

ENGL. 130 Fr. Wm. Hill
Chaucer 3 credits
A study of Chaucer's poetry in the context of medieval culture. Readings and assignments will concentrate on *The Canterbury Tales,* but will also cover the other major poems, such as the *Book of the Duchess* and the *Parliament of Birds.*

ENGL. 131 Dr. Murray
Shakespeare's Tragedies 3 credits
Study of *Romeo and Juliet, Hamlet, King Lear, Macbeth,* and *Othello* along with general theories of the tragic form

ENGL. 132 Dr. Murray
Shakespeare's Comedies 3 credits
Study of *As You Like It, Merchant of Venice, Twelfth Night, Midsummer Night's Dream. Much Ado About Nothing,* along with general theories of romantic comedy form.

ENGL. 133 Dr. Murray
Shakespeare: 1600-1616 3 credits
Study of *Troilus and Cressida, All's Well, Measure for Measure, Coriolanus, Cymbeline, Winter's Tale, Tempest* against a background of speculation as to why they cause problems of interpretation.

ENGL. 134 Dr. Murray
Shakespeare History 3 credits
One hundred years of British history seen through the eyes of both professional historians and Shakespeare. *Richard II* and *III, Henry IV, V,* and *VI* are covered.

ENGL. 135 Dr. Mitchell
Johnson and His Circle 3 credits
This course will examine the poetry and prose of Dr. Sam Johnson, the great 18th century author-critic, and will also treat the works of those talented writers whom he influenced directly. Analysis of prose strategies and poetic techniques will be stressed.

ENGL. 136 Dr. Fraustino
Keats: Death and Love 3 credits
Course will focus almost exclusively on one writer, John Keats, and explore the dynamic relationship in his poetry between death and love.

ENGL. 137 Dr. Gougeon
Melville-Hawthorne 3 credits
This course will survey a significant sampling of the short works of two of America's most famous Romantic authors. Consideration will be given to the historical milieu and the authors' literary responses to the problems and promises of the American experience.

ENGL. 138 Dr. Gougeon
Emerson Studies 3 credits
The early stages of the course will consist of lectures and readings dealing with Emerson's life, reform movements of his time, and works by Emerson which give insights into his general philosophy. In the second phase, students will be expected to involve themselves in specific individual research projects which will deal with a particular issue related to the question of Emerson and abolition.

ENGL. 139 Fr. J.J. Quinn
Hopkins 3 credits
(Prerequisites: Engl. 11 or Engl. 26) Gerard Manley Hopkins, the only priest-poet in history to be honored with a place in Westminster Abbey's Poets' Corner, will be studied in his poetry and Jesuit background as a Nature, Victorian, Mystical, Religious, Original, Theological, Meditative, and the first Modern Poet.

ENGL. 140 Prof. Hill
Conrad's Fiction 3 credits
A reading of major works by Conrad and survey of critical response to this quintessential modern Western writer.

ENGL. 141 Fr. J.J. Quinn
Flannery O'Connor 3 credits
A critical study of the short stories and novels of the modern American Christian writer.

ENGL. 143 Prof. John Hill
British Imperial Fiction 3 credits
The myths and meanings of the Imperial experience in the 19th and 20th centuries as represented in British fiction by Kipling, Conrad, Greene, Orwell and others.

ENGL. 144 Dr. Beal
Dante's Divine Comedy 3 credits
A canto by canto study, in translation, of Dante's dream vision of hell, purgatory, and heaven. Consideration given to the cultural milieu and to medieval art and thought as these affect the allegorical meaning and structure of the poem.

ENGL. 145 Dr. Whittaker
Irish Fiction: Joyce
This course explores the prose works of James Joyce, one of the lights of Anglo-Irish writing, and a major figure in twentieth century literature. We will read and discuss *Dubliners, A Portrait of the Artist as a Young Man,* and, with the help of various guides, the masterpiece, *Ulysses.* We will work to apprehend in Joyce both the universal and the peculiarly Irish.

ENGL. 146 Dr. Jordan
Modern Poetry 3 credits
Modern poets ranging from Yeats and Hopkins to Plath and Hughes are examined. Major emphasis is placed on close critical readings of representative works.

ENGL. 147 Fr. J.J. Quinn
Modern American Short Story 3 credits
An intensive study of representative modern American Masters of the short story form. The film version of many stories studied allows an enriching comparative experience.

ENGL. 148 Fr. J.J. Quinn
Irish Short Story 3 credits
Introduces American students to the variety and richness of the short story from the pens of such masters as: Yeats, Joyce, Frank O'Connor, Lavin, Kiely, F. O'Brien, McGovern, Jordan, Trevor, Beckett and others. Serious craftsmen aware of the verbal tradition, shapers of the Literary Revival, these masters of language forge a literature that affirms spiritual values in the midst of material misery.

ENGL. 149 Dr. McInerney
Dramatic Comedy 3 credits
Principles, modes, tactics used in dramatic comedy. Shakespeare to Neil Simon, as well as several films, analyzed as models. Opportunity for student writing of comedy.

ENGL. 150 Dr McInerney
Modern Drama 3 credits
A detailed introduction to the major trends and authors in 20th century British and American drama, with some Irish and Continental works included. Readings and assignments will focus on major figures like Shaw, O'Neill, Miller, Williams.

ENGL. 151-152 Dr. Zahler
History of the Theatre 6 credits
A study of the various ages of Western theatre; the method is concentration on individual playwrights, the historical circumstances in which they lived and worked, the traditions they inherited.

ENGL. 153 Fr. J.J. Quinn
Modern Novel 3 credits
The evolution of the novel from modern to postmodern times. Major American and English writers are studied from traditional narrative to self-conscious stylistic devices.

ENGL. 154 Dr. Casey
The English Novel: Defoe to Hardy 3 credits
The history of the English novel from its origins in the early 18th century until the end of the 19th century. The course will cover the literary, social, and intellectual sources of the novel as well as its artistic development. Richardson, Fielding, Austen, Dickens, Eliot are also covered.

ENGL. 156 Dr. Mitchell
Milton & 17th Century Poetry 3 credits
The poetry of John Milton, "a major figure", the Metaphysical poets and the Cavalier poets ought to bring the student to a reputable understanding of late English renaissance. The 17th century is a vital era for those wishing to understand the results of the Elizabethan Age and the onrush of the Restoration and 18th century poets.

ENGL. 157 Dr. Beal
The Camelot Legend 3 credits
The development of the "King Arthur story" from the medieval period to the present as it has appeared in poems, novels and plays. Reasons for the legend's enduring popularity

ENGL. 158 Fr. Joseph Quinn
Transcendentalists 3 credits
Course transcends typical limits of this literary period to Emerson and Thoreau's major works. Thus, Orestes Brownson, Margaret Fuller, Ellery Channing, Theodore Parker are covered.

ENGL. 159 Fr. Joseph Quinn
American Realists 3 credits
Study of representative figures in the post Civil War period, the period of the rise of American realism. Authors treated will be Mark Twain, Henry James, Stephen Crane and selected modern authors.

ENGL. 160 Fr. Joseph Quinn
American Prose Masters 3 credits
An assessment of the major late 19th and 20th century American prose writers by both the standard of their own age(s) and our own understanding. Hemingway, Faulkner, Twain and James; attempts will be made to detect certain continuities as well as divagations with respect to the legacy left these men by an earlier American tradition.

ENGL. 161 Dr. Ryan
Scandinavian-Russian Drama 3 credits
This course will consider the plays of the major Russian, Norwegian, and Swedish dramatists of the late 19th and 20th centuries. Among the playwrights to be studied are: Ibsen, Bjornsen, Strindberg, Chekhov, Gorky, Mayakovsky, and Blok.

ENGL. 162 Dr. Mitchell
Harlem Renaissance 3 credits
A concentrated study of the most fruitful era in American literature of the 1920's, let alone Black literature, with particular references to the social, economic, and political life of the times.

ENGL. 164 Dr. Mitchell
Black Literature 3 credits
This is an introductory survey course in Afro-American literature featuring an indepth examination of the works of major Black authors from the colonial American period to the present.

ENGL. 165 Dr. Gougeon
American Romanticism 3 credits
This course will deal with representative short works of America's six major Romantic authors: Emerson, Thoreau, Whitman, Hawthorne, Melville, and Poe.

ENGL. 166 Dr. Gougeon
Major Works: American Romantics 3 credits
Cooper's *The Prairie,* Emerson's *Nature,* Thoreau's *Walden,* Melville's *Moby Dick,* and others. Evaluation of the works in their historical context and the development of the American Romantic movement, 1820-65.

ENGL. 167 Dr Gougeon
Major Works: American Realists 3 credits
Twain's *Huckleberry Finn,* Howell's *The Rise of Silas Lapham,* James' *The American,* Crane's *The Red Badge of Courage,* Dreiser's *Sister Carrie,* and others. Works are evaluated in their historical milieu and the development of American Realism, 1865-1900.

ENGL. 168 Dr. Zahler
American Drama: 1919-1939 3 credits
A review of the first "golden age" of American drama, which includes biting masterpieces such as *The Hairy Ape, Awake and Sing,* and comic works such as *You Can't Take It With You* and *The Time of Your Life.*

ENGL. 171 Dr. Jordan
Myth of the Hero 3 credits
Mythic materials are examined to discover the underlying heroic archetypal patterns. Then modern literature is examined in the light of the same mythic patterns.

ENGL. 172-173 Dr. Jordan
Masterworks of Western Civilization 6 credits
Study of masterpieces of literature from the Hebrew Old Testament and classic Greek to the modern European illuminating the development of Western civilization.

ENGL. 174 Dr. Mitchell
The Bible as Literature 3 credits
A non-theological examination of the major literary achievements of the Old and New Testaments, emphasizing the generic diversity and aesthetic richness of their individual components.

ENGL. 175 Mr. Dessauer
Introduction to Publishing 3 credits
How books are created, manufactured, marketed, stored and delivered; how publishers finance, plan and manage publishing houses.

ENGL. 176 Mr. Bennett
Magazine Editing 3 credits
The process of editing is surveyed. Macro-editing (publishing for a defined audience and delighting, surprising, informing, and challenging it) is emphasized over micro-editing (grammar, punctuation, and so forth). Both are fit into the larger picture of promotion, fulfillment, circulation, advertising, production, and distribution.

ENGL. 177 Mr. Bennett
Children's Literature 3 credits
A broad survey of literature for children since 1800, with the emphasis on American works since 1950, including aesthetic consideration of the art and design of picture books. Works are considered for children up to the age of 12.

ENGL. 179 Dr. Ryan
Detective Fiction 3 credits
A study of the major writers of detective and mystery fiction from Conan Doyle to P.D. James. Among other authors read: Dashiell Hammett, Raymond Chandler, Agatha Christie, Dorothy Sayers, Ngaio Marsh, Georges Simenon.

ENGL. 181 Dr. Zahler
Best Seller Fiction 3 credits
A survey of the "best" novels written in the last ten years. Selection will be taken from the New York *Times* Best Seller list.

ENGL. 182 Dr. Whittaker
Humor in American Literature 3 credits
Insights into the American experience and character by examining the unique sources of our humor and its manifestation in our literature. Native "down East" and Old Southwest humor and the local colorists, as well as mainstream humorists as Washington Irving, Mark Twain, Dorothy Parker, James Thurber, and E. B. White, as well as comic playwrights such as Philip Barry, Kaufman and Hart, and Clare Booth Luce.

ENGL. 183 Fr. Hill
Literature of the Great War 3 credits
A study of the poetry of World War I, the fiction that developed out of the war, and the conditions that gave rise to this literature.

ENGL. 184 Dr. Zahler
Pulitzer Prize Plays 3 credits
A review of some of the outstanding American drama that has been awarded the Pulitzer Prize. From "classics" by O'Neill and Williams to recent winners such as *'Night, Mother.*

ENGL. 185 Dr. Passon
Introduction to Satire
An exploration of the historical, critical, and conceptual nature of satire, including established satirical conventions and techniques. Representative examples in fiction, drama, and poetry, from a variety of literary periods, will be considered. Spe-

cial emphasis will, however, be placed on British literature of the Restoration and Eighteenth Century, the Age of Satire. Though the course will focus on satirical literature, examples of satire from other media will be sampled.

ENGL. 190 Fr. J. J. Quinn
Travel Seminar: London 3 credits
Guided visits to London galleries, museums, theatres, cinema, broadcast studios, concert halls, Royal Shakespeare Co.; meetings with stage personalities. (Intersession.)

ENGL. 191-197 Staff
Guided Independent Study variable credit
A tutorial program open to Junior and Senior students. Content determined by mentor.

ENGL. 198 Staff
Internship variable credit
English majors can receive internship credits for a variety of on-the-job work experiences. Approval must be obtained beforehand from chairman and dean

See additional related course listings under Communications major.

Oscar-winning actress, Glenda Jackson, and Rev. J. J. Quinn, S.J., conducting campus seminar on Theatre Arts.

FINE ARTS

PROF. ROGERS, *Program Director*

The University's Fine Arts Program offers courses in art and music which develop students' creative expression, enhance their aesthetic appreciation and judgment, and deepen their understanding of the peoples and cultures from which classics in the Fine Arts have come.

Courses in Fine Arts can satisfy a student's General Education requirements in three ways:

a) applied or studio art courses (ART 185 and 186) can satisfy requirements in GE AREA III — Communications;

b) art and music history and appreciation courses can satisfy requirements in GE AREA IV — Humanities;

c) any course in Fine Arts can be used as a Free Elective.

ART 101-102 Prof. Jones
History of World Art 6 credits
The interpretation, appreciation, and aesthetic norms of painting, sculpture, and architecture of the ancient world (Egypt, Rome, Greece), Byzantium, the Middle Ages, and early Renaissance are discussed in the first semester. During the second semester, the High Renaissance, Baroque, Impressionism, Post-Impressionism, and Twentieth Century Art are the subjects studied.

ART 111-112 Prof. Jones
History of American Art 6 credits
A survey of architecture, sculpture, and painting in America from the 17th century to the present day. (GE AREA IV)

ART 119-120 Staff
Guided Independent Study in Art 3 credits
Courses are intended to meet specific needs. Content and methodology vary.

ART 125 Dr. Petrovic
Legacy of Greece and Rome 3 credits
Survey of the artistic and cultural treasures of classical Greece and Rome with a focus on their enduring legacy in our own civilization. (GE AREA IV)

ART 185 Prof. Rogers
Painting Techniques 3 credits
Instruction in the materials and techniques of acrylic painting will be directed toward building a basic foundation for students' approach to the medium. (GE AREA III)

ART 186 Prof. Rogers
Drawing 3 credits
A foundation course designed to develop the student's skills in basic drawing and perception. Various media are employed in exercises involving the use of line and shading, shape and space, design and composition leading to the development of visual expression. (GE AREA III)

MUS. 103-104 Staff
Music Appreciation 6 credits
Introduction to elements and forms Analysis and interpretation of respected masterpieces to encourage perceptive listening habits. The first semester will preview music development to Bach, while the second semester will treat compositions from Bach to the present including America No previous formal training is required (GE AREA IV)

MUS. 109 Staff
Survey of Keyboard Music 3 credits
The music written for the piano, organ, harpsichord and clavichord from the Renaissance to 20th Century. Designed for non-musicians, the course focuses on the development of keyboard instruments and the forms and composers that dominate the literature. Recordings, live performances and a field trip. (GE AREA IV)

MUS. 110 Sr. Roccasalvo
Hooked on the Classics 3 credits
An introduction to the classics designed especially for the student with an aversion for classical music. A study of the favorite classics including the "hits" of Bach, Mozart, Beethoven, Tchaikovsky, Rachmaninoff and memorable pieces of the American cultural scene, especially the Broadway musicale. (GE AREA IV)

MUS. 111 Prof. Edwards
Inside Music: A Conductor's View 3 credits
Not an historical survey, but rather the development of an appreciation for music which proceeds from cultivated listening in various forms: emotional, sensual, passive, intellectual. Mr. Edwards offers insight into the ultimate differences between "pop" and "classical" music from Renaissance through Computer music. Rewarding for novice or experienced listener. (GE AREA IV)

MUS. 112 Sr. Roccasalvo
Going for Baroque (1600-1750) 3 credits
A concentrated study in the musical developments of the early, middle and late Baroque period. Special attention given to the Italian, English and German Baroque. Musical developments in Russia. Contributions of the Jesuits in the field of sacred and secular music. (GE AREA IV)

MUS. 113 Sr. Roccasalvo
Mostly Mozart 3 credits
The course will follow the world's most versatile classical composer as he traveled to Italy, France, England; a study of the compositions he wrote while crisscrossing Europe. Concentration on the mature Mozart works composed during the last ten years of his life, i.e., 1781-91. A discussion of the film "Amadeus" and the myths surrounding Mozart's life in Vienna. (GE AREA IV)

MUS. 114 Sr. Roccasalvo
From Bach to Rock 3 credits
A survey of Classical music from J.S. Bach to recent developments of the twentieth century. Special attention given to the music of Slavic/Russian composers and to Haydn, Mozart and Beethoven. (GE AREA IV)

MUS. 115 Sr. Roccasalvo
Music and Religion 3 credits
The study of the music of world religions as it relates to their rituals, liturgies, and prayer. Special attention given to Eastern and Western plainchant, to the psalms, and to the music composed in the 16th and 17th centuries. A selective study of contemporary liturgical music. (GE AREA IV)

MUS. 117 Sr. Roccasalvo
Music Italian Style 3 credits
Italian music in the form of a travelogue to the great centers of musical activity — Florence, Rome, Venice and Bologna. A vicarious trip to Russia — Kiev, Moscow, St. Petersburg where Italian music flourished. Study of the rise of the oratorio and opera, the developments of instrumental music, especially the string instruments, and of famous makers of string instruments. (GE AREA IV)

MUS. 119-120 Staff
Guided Independent Study in Music 3 credits
Courses are intended to meet specific needs. Content and methodology vary

Cheryl Y. Boga directing University Concert Band.

FOREIGN LANGUAGES AND LITERATURES

DR. KAMLA, *Chairperson*

The program of the Foreign Language Department is designed to enable the student to read, write, speak and comprehend one or more foreign languages; to think and express him/herself logically, precisely and critically in one or more foreign languages; to acquire skills in literary criticism by reading representative foreign authors; to gain insight into the evolution of the culture and civilization of foreign peoples as reflected in their literature.

The Bachelor of Arts program in Classical Languages gives the student a solid foundation in Latin and Greek to engender an appreciation of the liberal aspects of Classical Studies. Classics majors are encouraged to take their junior year abroad at Loyola University's Rome Center of Liberal Arts with which the University of Scranton is affiliated.

A major in modern foreign language requires the completion of 36 credits in one language beginning with the intermediate level. Modern language majors normally take at least 12 credits in a second language, either modern or classical, as their cognate. A double major may be pursued by taking 36 credits in one language beginning with the intermediate level, and by satisfying the major and cognate requirements of another department. The placement of students at a particular foreign language level is the responsibility of the chairperson. Modern language majors are advised to take the Modern Language Proficiency Test in their junior or senior year.

FRENCH

FRENCH 1-2
Elementary French 6 credits
Designed to impart a good basic foundation in comprehending, speaking, reading, and writing of the French language. Designed primarily for students with no or insufficient background in the French language. Meets four hours a week or equivalent.

FRENCH 23-24
Intermediate French 6 credits
(Prerequisite: French 1 & 2, or equivalent) Designed to give greater scope and depth to the student's knowledge of the grammar and style of the French language, with readings of original works selected from French literature. Meets four hours a week or equivalent.

FRENCH 101-102
Advanced French Composition and Conversation 6 credits
(Prerequisites: French 23 & 24, or equivalent) An intensive course in French composition and conversation with emphasis on detailed study of advanced grammatical and stylistic usage of the French language. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

FRENCH 111-112
Survey of French Literature 6 credits
(Prerequisites: French 101 & 102, or equivalent) A review of French literature from the chanson de geste to the contemporary period. Meets three hours a week, or equivalent.

FRENCH 113-114
Survey of French Culture and Civilization 6 credits
(Prerequisites: French 101 & 102, or equivalent) A review of the historical, philosophical, artistic, literary, and scientific development of the French people from the Roman occupation to the present. Meets three hours a week, or equivalent.

FRENCH 131
Medieval and Renaissance French Studies 3 credits
(Prerequisite: French 101 & 102, or equivalent) Selected literary works from the eleventh century to the late Renaissance. Meets three hours a week, or equivalent.

FRENCH 141
XVIIth Century French Studies 3 credits
(Prerequisites: French 101 & 102, or equivalent) Literary, philosophical, and social expression from 1610 to 1715. Meets three hours a week, or equivalent.

FRENCH 151
XVIIIth Century French Studies 3 credits
(Prerequisites: French 101-102, or equivalent) The Englightenment from 1715 to 1789. Meets three hours a week, or equivalent.

FOREIGN LANGUAGE CONCENTRATION

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Language	Intermediate or Advanced Language	3	3
COGNATE	Lang. 1-2 or 23-24	Second Modern or Classical Language	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Lang. 101-102	Advanced Composition and Conversation	3	3
COGNATE	Lang. 23-24	Second Modern or Classical Language	3	3
COGNATE	Lang. 184-Elec.	Introduction to Linguistics* — Elective	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Theology/Religious Studies Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Language	Advanced Language Electives	6	6
COGNATE	Elective	Elective	3	
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Philosophy or Religious Studies Elective		3
GE FREE	Intd.	Interdisciplinary Elective		3
			15	18
		SENIOR		
MAJOR	Language	Advanced Language Electives	6	6
COGNATE	Elective	Elective	3	
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Philosophy or Religious Studies Elective		3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

*Required for modern language majors seeking certification in secondary education; recommended for Modern Language majors.

In AREA III, English 7 and Comm. 2 are recommended during first year.

In AREA IV, Hist. 114, 115, 116, 119 or 161-62 are recommended for modern language majors.

Students who begin language at the Advanced (101)level will take 6 credits less in the major and 6 credits more in the Cognate or FREE AREA in either Junior or Senior year.

MINOR. A minor in a foreign language, open to students in all disciplines, can be achieved by the completion of 18 credits above the elementary level in that language.

FRENCH 161
XIXth Century French Novel 3 credits
(Prerequisites: French 101-102, or equivalent) The development of prose narration as reflected in the literary movements of the age. Meets three hours a week, or equivalent.

FRENCH 162
XIXth Century French Poetry 3 credits
(Prerequisites: French 101-102, or equivalent) The development of poetic forms from the romantic to the symbolist movement inclusively. Meets three hours a week, or equivalent.

FRENCH 171
XXth Century French Novel 3 credits
(Prerequisites: French 101-102, or equivalent) The development of prose narration from the Dreyfus case to the present. Meets three hours a week, or equivalent.

FRENCH 173
XXth Century French Drama 3 credits
(Prerequisites: French 101-102, or equivalent) The development of dramatic forms from the Theatre Libre to the present. Meets three hours a week, or equivalent.

FRENCH 181
Advanced French Stylistics and Phonetics 3 credits
(Prerequisites: French 101-102, or equivalent) Designed to strengthen the speaking and writing skills while emphasizing the production of speech sounds and their transcription by the International Phonetic Alphabet. Exercises in enunciation and phaseology, besides a refined usage of grammar and syntax. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

FRENCH 191-197
Guided Independent Study Variable credit
(Prerequisites: French 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

GERMAN

GERMAN 1-2
Elementary German 6 credits
(Prerequisite: none) A complete course in the fundamentals of the German Language. Emphasis on reading of graded texts, with written and oral and aural exercises. Designed primarily for students with no or insufficient background in the German language. Meets four hours a week, or equivalent.

GERMAN 23-24
Intermediate German 6 credits
(Prerequisite: German 1-2, or equivalent) Reading from modern authors of moderate difficulty. Oral and written exercises. Systematic review of German grammar. Meets four hours a week, or equivalent.

GERMAN 101-102
Advanced German Conversation and Composition 6 credits
(Prerequisite: German 23-24, or equivalent) Selected texts in prose and poetry. Advanced practice in conversation and composition. Survey of German grammar. Meets three hours a week, or equivalent, and a one hour weekly independent language laboratory practice.

GERMAN 111-112
Survey of German Literature and Culture 6 credits
(Prerequisites: German 101-102, or equivalent) A survey of German literature from the eleventh century to the contemporary period, with special emphasis on the main intellectual currents as well as the social and political developments. Meets three hours a week, or equivalent.

GERMAN 151
The Age of Classicism 3 credits
(Prerequisite: German 101-102, or equivalent) A study of the literature of the late 18th century: Goethe, Schiller, Hölderlin. Meets three hours a week, or equivalent.

GERMAN 161
German Romanticism 3 credits
(Prerequisite: German 101-102, or equivalent) Readings in the novel, drama, and poetry of early 19th century authors, such as Kleist, E.T.A. Hoffmann and Novalis. Meets three hours a week, or equivalent.

GERMAN 162
Realism and Naturalism 3 credits
(Prerequisite: German 101-102, or equivalent) A study of the works of late 19th century authors, such as Storm, Fontane, and Keller. Meets three times a week, or equivalent.

GERMAN 171
German Literature up to 1945 3 credits
(Prerequisite: German 101-102, or equivalent) An in-depth study of such authors as Brecht, Mann, Kafka, and Rilke. Meets three hours a week, or equivalent.

GERMAN 172
Postwar German Literature 3 credits
(Prerequisite: German 101-102, or equivalent) Concentration on contemporary authors such as Frisch, Dürrenmatt, Grass and Böll, as well as representative authors from East Germany. Meets three hours a week, or equivalent.

GERMAN 175-176
Scientific German I-II 6 credits
(Prerequisite: None) Readings in the literature of chemistry, physics, and the biological sciences. The object of the course is to enable students to use German source material in their scientific work.

GERMAN 181-182
Advanced Stylistics 6 credits
(Prerequisites: German 101-102, or equivalent) Advanced study of syntax and semantics aimed at the development of stylistic sensitivity. Interdisciplinary textual analyses (business and commercial German, communications media, the sciences and humanities) for further practice in composition and conversation. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

GERMAN 191-192
Independent Study Variable Credit
(Prerequisites: German 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

SPANISH

SPANISH 1-2
Elementary Spanish 6 credits
(Prerequisite: None) Fundamentals of grammar, drill in pronunciation, conversation, suitable readings and written exercises. Designed primarily for students with no or insufficient background in the Spanish language. Meets four hours a week, or equivalent.

SPANISH 23-24
Intermediate Spanish 6 credits
(Prerequisites: Spanish 1-2, or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Meets four hours a week, or equivalent.

SPANISH 101-102
Advanced Composition and Conversation 6 credits
(Prerequisites: Spanish 23-24, or equivalent) A thorough study of Spanish grammar, composition, oral and written, with the aim of developing ability to write clear and fluent Spanish. Practice in oral composition. Meets three hours a week or equivalent, and a one hour weekly independent language laboratory practice.

SPANISH 111
Spanish Culture and Civilization 3 credits
(Prerequisites: Spanish 101-102, or equivalent) An overview of the diverse historical, political, religious and artistic factors that have determined the cultural make-up of the peoples of the Iberian peninsula. Meets three hours per week or equivalent.

SPANISH 112
Spanish-American Culture and Civilization 3 credits
(Prerequisites: Spanish 101-102, or equivalent) An overview of the culture and civilization of Iberoamerica with a dual focus on both the distinguishing features of the four principal cultural areas, and such unifying features as language and religion. Meets three hours per week or equivalent.

SPANISH 115-116
History of Spanish Literature 6 credits
(Prerequisites: Spanish 101-102, or equivalent) Study of Spanish literature from Cantar de Mio Cid to XXth century, with emphasis on main literary currents in each century. Meets three hours a week, or equivalent.

SPANISH 117-118
Survey of Spanish-American Literature 6 credits
(Prerequisites: Spanish 101-102, or equivalent) A survey of Spanish-American literature from the 16th century to the present, with representative readings from each of the principal cultural areas. Meets three hours a week, or equivalent.

SPANISH 121
XIXth and XXth Century Spanish Drama 3 credits
(Prerequisites: Spanish 101-102, or equivalent) Peninsular drama from Romanticism to the contemporary period, with emphasis on dramatic forms after Buero Vallejo and new directions of Spanish theatre in the post-Franco era. Meets three hours a week, or equivalent.

SPANISH 122
Spanish American Drama 3 credits
(Prerequisites: Spanish 101-102, or equivalent) Spanish American drama from the late XIXth century to the present, with emphasis on contemporary trends. Meets three hours a week, or equivalent.

SPANISH 161-162
Modern Spanish Prose 6 credits
(Prerequisites: Spanish 101-102, or equivalent) The short story and the novel in Spain in the late 19th and early 20th centuries. Meets three hours a week, or equivalent.

SPANISH 163-164
The Spanish American Novel 6 credits
(Prerequisites: Spanish 101-102, or equivalent) An examination of the esthetic, cultural and social aspects of prose fiction in Latin America over the past two hundred years. Meets three hours a week, or equivalent.

SPANISH 165-166
The Generation of 1898 6 credits
(Prerequisites: Spanish 101-102, or equivalent) Thorough examination of the movement, its political, historical, and social background: Ganivet, Unamuno, Azorin, etc. Meets three hours a week, or equivalent.

SPANISH 167-168
Spanish American Short Story 6 credits
(Prerequisites: Spanish 101-102, or equivalent) The development of the short story as a literary genre in Spanish America from the beginning of the 19th century to the present. Meets three hours a week, or equivalent.

SPANISH 171
Hispanic Lyric Poetry 3 credits
(Prerequisites: Spanish 101-102) The development of lyric poetry in the Spanish-speaking world. Examples of early poetry in Spain and Spanish America are studied to establish an awareness of the Hispanic lyric tradition, but the main focus of the course is on 20th century Spanish America and such figures as Gabriela Mistral, Pablo Neruda, and Cesar Vallejo.

SPANISH 172
The Hispanic Satricial Tradition 3 credits
(Prerequisites: Spanish 101-102, or equivalent) An examination of satirical writings beginning with Juan Ruiz, Quevedo, and Sor Juana Inés de la Cruz, and continuing through such modern masters as Pío Baroja, García, Márquez, and Juan José Arreola. Meets three hours a week, or equivalent.

SPANISH 173
The Literature of Social Protest 3 credits
(Prerequisites: Spanish 101-102, or equivalent) Serious social and political literature in Spain and Spanish America. Emphasis on 20th century. Meets three hours a week, or equivalent.

SPANISH 181-182
Advanced Stylistics 6 credits
(Prerequisites: Spanish 101-102) Designed to improve speaking and writing skills. Classroom activities include line-by-line critiques of student translation exercises and compositions: comparative analyses of Spanish and English syntax. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

SPANISH 191-192
Guided Independent Study Variable Credit
(Prerequisites: Spanish 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

GREEK

GREEK 1-2
Elementary Greek 6 credits
An intensive course in the fundamentals of Classical Greek grammar.

GREEK 23-24
Intermediate Greek 6 credits
Review of fundamentals. Readings from Zenophon, Euripides, and the New Testament.

GREEK 101
Homer 3 credits
Selected readings from the Iliad and the Odyssey.

An appreciation of the diction, thought and beauty of Homer.

GREEK 102
Thucydides 3 credits
Evaluation of fifth century Athens and of Thucydides as philosopher and historian. Readings from the History of the Peloponnesian War.

GREEK 105
Plato 3 credits
Readings of the *Apology*. A philosophical, historical and literary analysis of Plato and Socrates. Supplementary reading in the Crito and Phaedo.

GREEK 106
Euripides 3 credits
Reading and analysis of the *Medea* with an evaluation of the art and thought of Euripides.

GREEK 107
Sophocles 3 credits
Evaluation of Sophocles as a poet, dramatist and thinker through a study of the *Oedipus Tyrannus*.

GREEK 108
Demosthenes 3 credits
An analysis of the *De Corona* as a model of rhetoric. Consideration of the rhetorical norms established by Aristotle.

GREEK 109-110
Readings in Greek Literature 3-6 credits
Selections from Greek writes to suit the student's special interest.

GREEK 145
Roots of Greek in English 3 credits
The relationship of both Greek and English to the other languages of the Indo-European family; the Greek elements that have come into English are presented: e.g., bases, prefixes, numerals, hybrids, etc. A study of the 20-25% English words which come from Greek, particularly in scientific fields.

GREEK 191-192
Guided Independent Study Variable Credit
(Prerequisites: Greek 23-24) A tutorial program open to junior and senior students only. Content determined by mentor.

LATIN

LATIN 1-2
Elementary Latin 6 credits
An intensive course in the fundamentals of Latin. Reading and composition.

LATIN 23-24
Intermediate Latin 6 credits
Review of fundamentals. Reading of selections from Caesar, Cicero and Virgil.

LATIN 101
Horace and Juvenal 3 credits
A study of Roman satire revealing the life, manners and thought of the times.

LATIN 103
Cicero and Lucretius 3 credits
Selections from the *Tusculan Disputations* and the *De Rerum Natura* illustrate contrasting developments in Roman thinking. The course includes a brief survey of ancient philosophy.

LATIN 104
Christian Latin Literature 3 credits
Selections from Christian Latin writers with concentration on the *Confessions* of St. Augustine.

LATIN 107
Livy and Virgil 3 credits
Selections from Livy I and XXI, and from Books VII-XII of Virgil's *Aeneid*.

LATIN 108
Horace and Catullus 3 credits
Lyric poetry illustrated by the *Odes* of Horace and selected poems of Catullus.

LATIN 109-110
Readings in Latin Literature 3-6 credits
Selections from Latin writers to suit the student's special interest.

LATIN 111-112
Medieval Latin 6 credits
Introduction to medieval Latin. Readings in medieval prose and poetry from the ninth to the fifteenth centuries.

LATIN 113
History of Latin Literature 3 credits
A survey of Roman and post-Roman Latin literature. The course is taught in English. No Latin prerequisite.

LATIN 145
Roots of Latin in English 3 credits
The relationship of both Latin and English to the other languages of the Indo-European family; the Latin elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. Approximately 60-65% of English words come from Latin.

LATIN 191-192
Guided Independent Study Variable Credit
(Prerequisites: Latin 23-24) A tutorial program open to junior and senior students only Content determined by mentor.

SLAVIC

SLAV 107 Dr. Petrovic
Masterworks of Russian & Slav Literature 3 credits
A survey of major literary achievements of Slavic peoples. Dostoyevsky, Tolstoy, Cosic, Sienkiewicz and Solzhenitsyn will be read. No knowledge of Slavic languages is required. All readings and lectures are in English. (GE AREA IV)

CHINESE

CHINESE 1-2
Elementary Chinese 6 credits
Fundamentals of modern Mandarin. Emphasis on everyday conversation and reading comprehension. Both conventional and simplified characters taught. Designed for students with no background in any Chinese language. Meets four hours a week, or equivalent.

LANGUAGE

LANG. 104
World of Language 3 credits
(No prerequisite) Designed to provide students with a broad overview of the nature and function of languages. Topics include theories on the origin of languages, evolution and change in language, the importance of language in human society, culture, contemporary politics, and the business world; and identifying successful approaches to language study.

LANG. 184
Introduction to Linguistics 3 credits
Inquiry into the nature of language, its various systems manifested by the principal languages of the world. Principles of structural analysis. Open to language and non-language majors. No prerequisite.

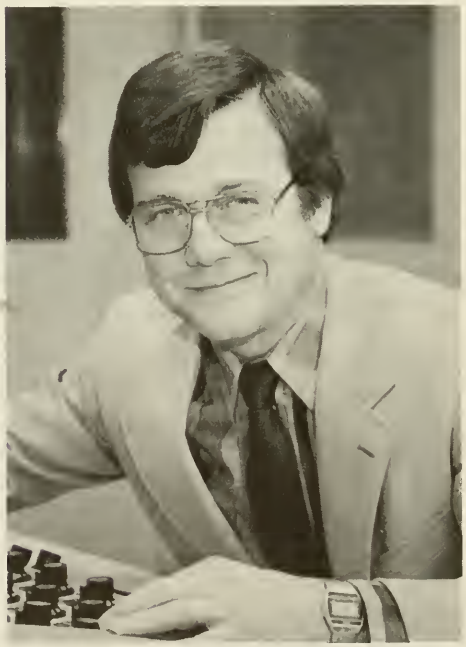
PORTUGUESE

Elementary Portuguese 1-2 6 credits
Introduction to the Portuguese language. Designed for beginners. Meets four hours a week, or equivalent.

ITALIAN

Elementary Italian 1-2 6 credits
Introduction to the Italian language. Designed for beginners. Meets four hours a week, or equivalent.

Intermediate Italian 23-24 6 credits
(Prerequisite: Italian 1-2, or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Meets four hours a week, or equivalent.



Dr. Thomas Kamla, Chairperson, Department of Foreign Languages and Literatures

HISTORY

DR. DeMICHELE, *Chairperson*

The department aims: 1. to train the student in solid historical methodology; 2. to present history as the study of interdependent human activities and concrete events which have social significance; 3. to engender an intelligent and critically sympathetic understanding of various civilizations and cultures.

The department offers a special program that enables qualified students to obtain both their Bachelor and Master's degree within four calendar years. The program utilizes Intersession or summer sessions and the use of four graduate history courses as part of the undergraduate program. The chairperson of the department should be contacted for details of the program.

See the Pre-Law program on page 51 for details of the department's success in this area.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	History 3-4	Europe: 1500 to Present	3	3
MAJOR	History 1-2	United States History	3	3
COGNATE	Elective	Electives**	3	3
GE AREA III	Communications	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
GE FREE	Elective	Elective	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	History	Electives*	3	3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	History	Electives	3	3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Social/Behavior	Electives	6	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Intd.	Interdisciplinary Elective		3
			18	15
		SENIOR		
MAJOR	History	Electives	6	6
COGNATE	Electives	Electives	3	3
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE FREE	Elective	Elective		3
			15	15
			TOTAL:	127 credits

*Department recommends Hist. 100, Research Methods, for Sophomore History majors.

**Students may use cognate electives to develop a second major.

MINOR. A minor in History (18 credits) should include History 1, 2, 3 and 4 plus any two additional history courses.

HIST. 1-2 Staff
History of the United States 6 credits
The United States from the time of its European beginnings to the present with special emphasis on the history of Pennsylvania; colonial origins to Reconstruction; Gilded Age to the modern era.

HIST. 3-4 Staff
Europe, 1500 to the Present 6 credits
European history with concentration upon the political aspects of European development. The rise of national monarchies; political, social, economic, and intellectual developments; industrialism, the new nationalism and liberalism.

HIST. 100 Dr. Homer
Research Methods: The Historian at Work 3 credits
Introduction to the techniques of historical research including the use of library and bibliographical materials, the use and interpretation of evidence, and the preparation of written papers. Course is designed to assist any student, regardless of major, who wishes to improve research and term paper skills.

HIST. 101-102 Fr. Scott
Ancient History 6 credits
The rise of civilization in Mesopotamia, Egypt, the Indus Valley and the Mediterranean world; growth of civilization in China and India; the rise of Greece and Hellenism; Rome from Republic to Empire; the barbarians and the end of ancient culture; the origins of Christianity; pre-Colombian civilization in the New World.

H/PS 103 Dr. Feller
Saving America's Past 3 credits
Introduction to problems of the changing urban-suburban environment. Using Lackawanna County as a model study region, the issue of urban planning, architectural recycling, historic preservation and citizen awareness will be explored. Walking tours of Scranton and surrounding communities.

HIST. 104 Dr. Feller
American Decorative Arts 3 credits
Introduction to the sources of American decorative and folk arts and interior architecture from the Boston Tea Party to the Philadelphia Centennial Exhibition. The arts themselves and evolution and development of American tastes will be examined as primary source material for the cultural historian, reflective of contemporaneous socio-political trends. Visits to public and private collections in the region.

HIST. 105 Dr. Homer
History as Biography 3 credits
An exploration of the nature of biography and its relationship to the study of the past. Biographies of several major figures from the modern era will be read and studied to exemplify different biographical techniques and their utility as means of historical inquiry.

HIST. 110-111 Fr. Scott
Medieval History 6 credits
The civilization of medieval Christendom from the fall of the Roman Empire to the beginning of the fourteenth century; its religious, social, economic, cultural and political aspects; the relationship between Church and society, belief and life style, ideal and reality; the interaction between Western Christendom, Byzantium and Islam.

HIST. 112-113 Fr. Scott
Renaissance and Reformation 6 credits
Europe in transition from medieval to modern (from the beginning of the fourteenth century to the middle of the seventeenth century); the decline of medieval civilization; the Renaissance, the shattering of Christian unity in the Protestant Reformation; the Catholic response, the age of exploration; the struggle for empire.

HIST. 114 Prof. Williams
French Revolution to 1815 3 credits
Historical antecedents; the philosophies; the republicanism and the fall of the monarchy; Reign of Terror; the Directory; Napoleon; internal achievements; significance of the Spanish and Russian Campaigns; and War of Liberation.

HIST. 115 Prof. Williams
Europe, 1815-1875 3 credits
The congress of Vienna and the European restoration; Industrialism, Liberalism, Socialism, and Nationalism; the revolutions of the 1840's; the unification of Italy and the German Empire; Russia and the Lesser States of Europe; the Third French Republic.

HIST. 116 Prof. Williams
Europe, 1875-1918 3 credits
The domestic problems confronting France, Italy, Germany, Central and Eastern Europe, and Russia. Competition for colonies and markets; the growth of alliances; World War I and the Treaty of Versailles. The Russian Revolution and Communism.

HIST. 117-118 Dr. Earl
Twentieth Century Europe 6 credits
World War I; Treaty of Versailles; Russia becomes the U.S.S.R.; the European struggle for security;

Italian Fascism; Rise of Nazi Germany; Asia between the two wars; World War II; loss of colonial empires in Africa and Asia; development of the Cold War; Marshall Plan and NATO.

HIST. 119 Staff
Special Topics in European History 3-6 credits
The particular topic or topics will vary from year to year depending on the instructor and changing student needs. Exact course description will be provided at pre-registration. Possible topics include Nazism, World War I, "Ism" in Modern Europe, etc.

H/PS 120-121 Dr. Hueston
American Diplomatic History 6 credits
A study of American diplomatic history and principles. The Revolution. Early American policies on isolation and expansion. The War of 1812. The Monroe Doctrine. Manifest Destiny. The Civil War. American imperialism and the Spanish-American War. Latin American diplomacy in the twentieth century. World War I. Attempts to preclude further war. World War II. Cold War. Contemporary problems.

H/PS 122-123 Prof. Scully 6 credits
American Constitutional and Legal History
(Recommended for Background: History 1 & 2) The juridicial concepts of the colonial and revolutionary periods; backgrounds of the Federal Convention; the nature of the Constitution, its interpretation by Marshall and Taney. The constitutional problems occasioned by the Civil War; the new amendments; the role of the States in a Federalist system. Key cases will be analyzed in detail and set in their proper historical perspective.

H/PS 124-125
American Political and Prof. Scully
Social Thought 6 credits
(Recommended for Background: History 1 & 2) An inquiry into the major philosophies which helped shape our institutions. Puritan concepts; views of the independents; pre-Revolutionary society and thought and the notion of independence; the Constitution as it represents a compromise between the conservative and liberal traditions; Jeffersonian and Jacksonian democracy; social, economic, and political ramifications or the slavery question. Triumph of the nationalist view.

HIST. 127 Dr. Connor
American Ecclesiastical History 3 credits
Survey of the growth and development of the Catholic Church in America from the beginnings of Spanish colonization in Florida to the pronouncements of a fully developed religious body in the 1950's.

HIST. 128 Staff
Special Topics in American History 3-6 credits
An analysis of selected topics in American history from the colonial era to the present. The particular topic or topics will vary from year to year depending on the instructor and changing student needs.

HIST. 130-131 Dr. Feller
Twentieth Century United Sates 6 credits
An intensive study of American Development from 1900 to the present. Stress will be placed on the Roosevelt Era and its Progressivism. Wilson's New Freedom; diplomacy of the First World War; the return to "normalcy"; the Great Depression and the New Deal; Roosevelt and world politics; origins and consequences of World War II. The Truman Era.

H/SO 134 Dr. Feller
Introduction to Archaeology 3 credits
An introduction to the study of archaeology from the anthropological and historical perspectives. The problems of survey and site recognition, excavation planning, record keeping, treatment of artifacts, and interpretation will be explored. Problems of above-ground archaeology examined. Site visitations included.

HIST. 135 Dr. Homer
Europe in the Age of Absolutism 3 credits
(Recommended for Background: History 3) A study of the major political, social, economic and intellectual movements in Europe from the rise of royal absolutism until the outbreak of the French Revolution.

HIST. 136-137 Dr. Hueston
American Ideas and Culture 6 credits
(Recommended for Background: History 1 & 2) History of American art, architecture, literature, and thought. Colonial Developments. The American Enlightenment. The emergence of a national culture. Romanticism. Post-Civil War. Realism in American art and literature. The intellectual response to the industrial order. The American mind in the 1920's. The intellectual and cultural response to the depression. Post-World War II developments.

HIST. 140 Dr. DeMichele
England, 1485 to 1714 3 credits
The end of the Wars of the Roses; Tudor Absolutism, Henry VIII and Reformation; Elizabeth I; Renaissance and Elizabethan Music and Literature; The Stuarts; Colonialism; Commonwealth; Restoration; the Revolution of 1688; Reign of Anne.

HIST. 141 Dr. DeMichele
England, 1714 to Present 3 credits
Parliamentary rule: Cabinet government; Political parties; Industrial Revolution, 19th Century reforms; building of a British Empire; World War I; problems of readjustment; World War II; Britain and the world today.

H/PS. 142 Dr. DeMichele
English Constitutional and Legal History to 1485 3 credits
Anglo-Saxon basis; fusion of Anglo-Saxon and Norman political institutions; Angevin innovations; Magna Carta; concept of representation; beginnings of the Common Law; jury system; emergence of Parliament.

H/PS. 143 Dr. DeMichele
English Constitutional and Legal History, 1485 to Present 3 credits
Tudor absolutism, struggle between royal prerogative and Parliament; rise of House of Commons; Parliamentary supremacy after 1688; development of Cabinet government; democractic reforms; Parliamentary Bill of 1911; extension of administrative law.

H/PS 148 Dr. Homer
War and Modern Society 3 credits
(See description under Political Science.)

HIST. 149 Dr. Dougherty
America's Military Heritage 3 credits
Tells how events and leaders have influenced the development of the U.S. armed forces, showing that despite changing weapons and battlefield, the principles of warfare remain as valid in today's strategy and planning as ever.

HIST. 150 Dr. Earl
Imperial Russia 3 credits
From the crystallization of political forms in the 9th century through the Kievan State, Mongolian Invasion, Rise of Muscovy to the Eurasian Empire from the 17th to the end of the 19th century.

HIST. 151 Dr. Earl
Russian Revolution and Aftermath 3 credits
A study of the development of radical thought in 19th and 20th century Russia. Analysis of various factors and forces at work in revolutionary Russia. Lenin, War Communism, NEP, Stalin.

H/PS 152 Dr. Earl
Soviet Foreign Policy 3 credits
(See description under Political Science.)

HIST. 155-156 Fr. Scott
Byzantine Civilization 6 credits
The Byzantine Empire from its origins in the Fourth century to its collapse in the 15th; the political and economic growth of the Empire with emphasis on its art and religion.

HIST. 161-162 Prof. Williams
Latin American History 6 credits
Pre-Colombian America; the Spanish and Portuguese colonial area, developments to the early nineteenth century. The Latin American Republics, Castroism, The Alliance for Progress, with special stress on inter-American problems.

HIST. 165 Dr. Homer
Modern Germany: Unification & Empire 3 credits
The 1815 Confederation; 1848 and the failure of liberalism; the Age of Bismark; Wilhelm II and the "New Course"; World War I and the Collapse of the Empire.

HIST. 166 Dr. Homer
Modern Germany: the 20th Century 3 credits
The troubled birth of the Weimar Republic; the Ruhr Crisis; the Stresemann Era; economic collapse and the rise of Nazism; the Third Reich, and World War II; the two Germanies and the "economic miracle".

HIST. 170 Dr. Champagne
Colonial America, 1607-1763 3 credits
The European background of the Age of Discovery; the founding of the British-American colonies; their political, economic and cultural development; British colonial policy and administration; the development of an American civilization.

HIST. 171 Dr. Champagne
American Revolution, 1763-1789 3 credits
Background to the War for Independence; British imperial policy; the development of economic and ideological conflicts; the military contest; British ministerial policy and the parliamentary opposition; the Confederation; the formation of the Constitution.

HIST. 173 Dr. Champagne
The Early National Period of American History, 1789-1824 3 credits
Beginning of the New Government; Politics and diplomacy in the Federalist Era; Jeffersonian Democracy; the War of 1812; Nationalism and Sectionalism; Marshall and the rise of the supreme Court.

HIST. 174 Dr. Champagne
The Age of Andrew Jackson, 1824-1850 3 credits
Politics and Society in the Jacksonian Era; Slavery and the Antislavery Crusade; American Expansion in the 1840's; the Mexican War; the Emergence of the Slavery Issue.

HIST. 175 Fr. Masterson
Civil War & Reconstruction 3 credits
Crisis Decade; disintegration of national bonds; The War: resources, leadership, strategy, politics, monetary policy, diplomacy; Reconstruction: realistic alternatives, Presidential and Congressional phases, effects in North and South

H/PS 176 Dr. DeMichele
World Politics 3 credits
(See description under Political Science.)

HIST. 177 Dr. Hueston
History of United States Immigration 3 credits
A study of immigration to the United States with emphasis on the period from the Revolution to the restrictive legislation of the twentieth century. Motives and characteristics of immigration. Experiences of newcomers.

HIST. 178 Dr. Hueston
A History of American Assimilation 3 credits
The history of assimilation (or adjustment) of immigrants to American life. Nativism from pre-Civil War days to the 1920's. The "Old Immigration" and the "New Immigration" considered in the social, political, economic, and religious contexts of their eras. Special problems of the second generation from the 1850's to the 1960's.

H/PS 179 Prof. Williams
The Third World 3 credits
A study of the developing nations of the Third World and their relationships with the developed industrial nations in the contemporary world.

HIST. 180 Dr. DeMichele
Great Discoveries 3 credits
Historical analysis and assessment of the great scientific discoveries and technological developments of mankind from the Age of the Renaissance to the Space Age

HIST. 181 Dr. Ann Hill
Modern China 3 credits
Study of modern Chinese society from the Revolution of 1911 to the present with an emphasis on recurrent problems of modernization as well as contemporary ideologies and institutions within the People's Republic of China.

HIST. 182 Prof. Williams
World War II, Cold War & Detente 3 credits
The diplomacy of World War II; the development of the Cold War between the U.S. and the U.S.S.R. and the adoption of the policy of Detente.

HIST. 183 Dr. Ann Hill
History of Southeast Asia 3 credits
Mainland Southeast Asia in the 20th century, including Colonial Administration and the post-World War II transition to independence. Emphasis on changes in local political and social systems and in the peasant economy.

HIST. 185 Dr. Earl
Total War 3 credits
Examination of the tactics, strategy, and global significance of World War II. The logistics and scope of the conflict. Importance of propaganda, patriotism and the people. Film-seminar approach. Film fee.

H/PS 188 Drs. Earl, DeMichele
Ethnic & Racial Minorities in Northeastern Pennsylvania 3 credits
Film-seminar approach to study of various ethnic groupings in Northeastern Pennsylvania. Seeks to achieve better understanding of the immigrant's problems and his accomplishments through use of documentary and feature films.

Hon. and Mrs. Thomas P. "Tip" O'Neill receiving honorary degrees at 1985 commencement.

HUMAN RESOURCES

Dr. SZUHAY, *Chairperson*

The Health and Human Services curriculum of the Human Resources Department is designed to develop in students the values, knowledge and skills necessary to work with people in a variety of helping relationships. The sequence of courses includes significant integration with the fields of psychology and sociology. As such, the curriculum is interdisciplinary and allows the student maximum freedom in exploring related academic fields. The program is geared to students who have high social service interests as well as general scientific interest and aptitudes in the social and behavioral sciences. The curriculum is career oriented; this aids the graduate in securing entry-level positions with public and private agencies in programs concerned with preventive and remedial health, welfare and rehabilitation services. The curriculum also provides a solid foundation for future graduate level education in the helping professions, particularly in rehabilitation counseling, school counseling, social work, and psychology. The Department also administers the Master's Degree programs in Rehabilitation Counseling and Human Resources Administration.

HEALTH AND HUMAN SERVICES

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	H/HS 10	Freshman Seminar	1	
MAJOR	H/HS 11	Foundations of Human Services	3	
MAJOR	H/HS 12	Health and Human Services Interventions		3
COGNATE	Elective	Elective		3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Phil. — Intro. to Theology	3	3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			17	16
		SOPHOMORE		
MAJOR	H/HS Elective	Elective	3	
MAJOR	H/HS 115-116	Health & Medical Information I-II	3	3
COGNATE	Soc. 21-Elective	Principles of Sociology — Elective	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Elective		3
GE AREA IV	Humanities	Elective		3
GE AREA V	T/RS-Phil. 110	Theology Elect. — Ethics	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	19
		JUNIOR		
MAJOR	H/HS 101-102	Case Management-Counseling Theories	3	3
MAJOR	Psych. 144 or 155	Childhood & Early Adoles. or Late Adoles., Adulthood & Aging		3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE ARE V	Phi.-T/RS	Elective		3
GE FREE	Intd.	Interdisciplinary Elective	3	
			15	15
		SENIOR		
MAJOR	H/HS 103	Group Dynamics	3	
MAJOR	H/HS 199	Internship		3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Elective	3	
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 128 credits

HEALTH AND HUMAN SERVICES ADMINISTRATION

The Health and Human Services Administration curriculum is designed to develop in students the values, knowledge, and skills necessary to enter the growing field of health and human services administration. The sequence of courses includes a significant integration of the fields of health, human services, and public administration. As such, the curriculum is interdisciplinary and provides the student with a broad base of knowledge for securing entry-level positions with public and private agencies in positions concerned with the administration of preventive and remedial health, welfare, and rehabilitative services. The curriculum also provides a solid foundation for future graduate level education in various administrative disciplines such as human resources administration, public health, hospital administration, planning, public administration, and rehabilitation administration.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	H/HS 10	Freshman Seminar	1	
MAJOR	H/HS 11-12	Foundations of Human Services — Health and Human Services Interventions	3	3
COGNATE	Pol. Sci. 5-6	Intro. to Public Administration I-II	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20-T/RS 21	Intro to Philosophy — Intro to Theology	3	3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			17	16
		SOPHOMORE		
MAJOR	H/HS 115-116	Health and Medical Information I & II	3	3
MAJOR	H/HS 121	Organization and Administration of Hospitals		3
COGNATE	Electives	Electives	6	6
GE AREA III	CMPS 21*	Intro to Computer Science	3	
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110-T/RS	Ethics — Elective	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19	16
		JUNIOR		
MAJOR	H/HS 122-13	Organization and Delivery of Health Care Services — Career Plans	3	3
COGNATE	Pol. Sci. 183-112	Public Personnel — Politics of Budgetary Process	3	3
GE AREA I	Acc. 3*-4*	Financial Accounting — Managerial Accounting	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 132*-133*	Medical Ethics — Business Ethics	3	3
GE FREE	Intd.	Interdisciplinary Elective	3	
			18	15
		SENIOR		
MAJOR	H/HS 103-133	*Group Dynamics — Grantsmanship*	3	3
MAJOR	H/HS 101-H/HS 199	*Case Mgt. — Internship*	3	3
COGNATE	Electives	*Electives*	3	3
GE AREA IV	Humanities	*Electives*	3	3
GE FREE	Electives	*Electives*	3	3
			15	15

*Specific Departmental Recommendations

TOTAL 131 credits

H/HS 10 Staff
Freshman Seminar 1 credit
A group reaction orientation workshop for freshman majors only, designed to improve advising of students in human services and to enhance faculty-student relationships.

H/HS 11 Staff
Foundations of Human Services 3 credits
Designed to increase the student's awareness of his needs, his impact on other persons, and the demands of his environment. The relationship between the professional helper and his clients as the foundation of all human service efforts is emphasized. Group methods will be employed.

H/HS 12 Staff
Health and Human Services Interventions 3 credits
Health and human services systems are overviewed. Specific intervention strategies and administrative policies and procedures.

H/HS 13 Staff
Career Planning 3 credits
Designed to explore theories of vocational development, vocational decision-making, career planning, specific occupations, and job hunting.

H/HS 101 Staff
Case Management and Interviewing 3 credits
The role of the helper as a case manager or coordinator of services is examined. Initial interviewing skills and techniques are discussed. Case studies and role playing activities are utilized.

H/HS 102 Staff
Counseling Theories and Techniques 3 credits
(Prerequisite: H/HS 101) The role of the helper as an individual counselor or caseworker is examined. Theories and techniques as well as problems in individual counseling are explored.

H/HS 103 Staff
Group Dynamics 3 credits
(Prerequisite: H/HS 101 and 102) The role of the helper as a group intervention specialist is examined. Theories and techniques of group counseling, group process, and group dynamics are explored and practiced in controlled settings.

H/HS 111 Staff
Introduction to Recreational Therapy 3 credits
Designed to develop an understanding of purpose, organization, administration and delivery of recreational therapy services for handicapped.

H/HS 115-116 Staff
Health and Medical Information I & II 6 credits
General data on societal health status is presented along with descriptions of the health professions involved in health services delivery. Selected physical conditions and/or disabling conditions are illustrated with particular reference to body systems involved, treatment possibilities, residual functional limitations, and psycho-dynamics of each condition. (H/HS 115 is prerequisite.)

H/HS 117 Staff
Addictive Behavior 3 credits
Physical, social and psychological aspects of addiction: biochemical, nutritional, psychodynamic, and behavioral approaches to assessment, treatment, and prevention of addiction. Drug abuse, alcoholism, smoking, obesity.

H/HS 118 Staff
Stress Management 3 credits
Focuses on stress which affects thoughts, emotions, and the body. Stress diseases of adaptation include cancer, Type A Behavior, GI tract disorders along with stress-related thought disorders and emotional disturbances. Students learn to apply relaxation training, cognitive restructuring, and record keeping in the treatment of their own as well as others' stress.

H/HS 121 Staff
Organization & Administration of Hospitals 3 credits
The role and responsibilities of hospitals, relationships with other components of the health system and an analysis of the process of hospital administration.

H/HS 122 Staff
Organization and Delivery of Health Care Services 3 credits
An overview of the nature and organization of health care services in the United States is presented. The factors affecting the delivery of such services are identified to provide an understanding of the evolution and dynamics of the health care system as well as prospects for future development.

H/HS 133 Staff
Grantmanship 3 credits
Proposal writing for program planning and/or soliciting funds from public and private sources is discussed. Included are the concepts of needs assessment, programming strategy, program evaluation, and budgetary considerations. Sources of funding are presented as well as funding resources materials.

H/HS 199 Staff
Internship in Human Services 3-6 credits
Supervised practical experience in a community agency providing human services. In selected cases a student may receive credit for part-time paid work experience.

MATHEMATICS

Dr. BEIDLER, *Chairperson*

Besides offering a classical undergraduate degree in mathematics, mathematics majors can take major and cognate courses in some of the fastest growing areas related to mathematics. These include courses in statistics, actuarial mathematics, and computer science. The usual cognates for mathematics majors are computer science and the natural sciences. With the permission of the department chairperson, other cognates may be chosen.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Math. 14-21	Analysis I-II	4	4
COGNATE	CMPS 24-25	Introduction to Computer Science I-II	3	3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			17	17
		SOPHOMORE		
MAJOR	Math. 22-106	Analysis III — Advanced Analysis I	4	3
COGNATE	Phys. 11-12	Elements of Physics I-II	4	4
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS	Theology/Religious Studies Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			18	17
		JUNIOR		
MAJOR	Math. 108-111	Modern and Linear Algebra	3	3
MAJOR	Math. Elec.-101	Elective — Differential Equations	3	4
COGNATE	Electives	Electives	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE FREE	Elective — Intd.	Elective — Interdisciplinary Elective	3	3
			18	16
		SENIOR		
MAJOR	Math.	Electives	6	3
COGNATE	Electives	Electives	3	6
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
			15	15
			TOTAL:	133 credits

CMPS 130, 140, and 160 may also be used as Math Electives.

MATH 1-2 Profs. Bartley, Johns
Math Discovery 6 credits
Study of fundamental ideas of the science of mathematics. Applications of mathematics in social and management sciences used to furnish foundation for an appreciation of the influence of mathematics in our society.

MATH 3-4 Staff
Quantitative Methods I-II 6 credits
Finite Mathematics covering functions and graphs; matrix methods; linear programming and probability; second half covers differential and integral calculus, including applications to management problems.

MATH. 10-11 Dr. Sidbury
Discrete Mathematics I-II 6 credits
For computer science majors with selected topics from algorithm analysis, mathematical logic, induction, discrete number systems, basic combinatorics, difference equations, discrete probability, graph theory, and recursion.

MATH. 13 Staff
Pre-Calculus Mathematics 4 credits
An intensified course covering the topics of algebra and trigonometry.

MATH. 14 Staff
Analysis I 4 credits
The beginning of a twelve credit sequence covering the topics of analysis.

MATH. 21-22 Fr. Powers, Dr. Sinzdak
Analysis II & III 8 credits
(Prerequisite: Mathematics 14, or equivalent) An integrated course covering the topics of calculus using modern methods.

MATH. 42 Prof. Bartley
History of Math 3 credits
Important mathematical discoveries in their historical context; the works of some prominent mathematicians and the practical significance of their accomplishments. (GE AREA I only)

MATH. 44 Prof. Johns
Special Topics of Statistics 3 credits
Study of the computational aspects of statistics; hypothesis testing, goodness of fit; non-parametric tests; linear and quadratic regression, correlation and analysis of variance.

MATH. 46 Prof. Eichelsdorfer
Theory of Games 3 credits
Study of the basics of game theory concentrating on its most elementary aspects. Attention paid to two-person zero-sum (fair) games.

MATH. 101 Dr. Sinzdak
Differential Equations 4 credits
(Prerequisite: Math 22) Treatment of ordinary differential equations with applications.

MATH. 102 Prof. Johns
Probability Theory 3 credits
Basic concepts of probability theory, random variables and their distribution functions; limit theorems and Markov chains.

MATH. 103 Dr. Sinzdak
Advanced Differential Equations 3 credits
(Prerequisite: Math. 101) The treatment of special differential equations and partial differential equations and their applications.

MATH. 104 Prof. Johns
Statistics 3 credits
(Prerequisite: Math. 4 or Math. 14) Measure of central tendency measure of dispersion, continuous random variables, expected value, moments, confidence intervals, hypothesis testing, regression and correlation.

MATH. 105 Prof. Johns
Geometry 3 credits
Euclidean; non-Euclidean and projective geometry. Transformations and Invariants.

MATH. 106-107 Fr. Levko
Advanced Analysis I-II 6 credits
(Prerequisite: Math 22 or permission of instructor) Topics include: Real number system; functions; limits; continuity; differentiation; integration theory; partial differentiation; sequences and series; vector analysis; uniform convergence.

MATH. 108 Dr. Sinzdak
Modern Algebra 3 credits
(Prerequisite: Math 22 or permission of instructor) Fundamental ideas and properties of groups, rings, fields, polynomials over a field.

MATH. 111 Dr. Sinzdak
Linear Algebra 3 credits
(Prerequisite: Math 22) Vector spaces, matrices, determinants, linear transformations, eigenvalues and eigenvectors, inner products and orthogonality.

MATH. 115 Staff
Thesis variable credit
(Prerequisite: 24 credits in mathematics) A student's results of the investigation of a specific mathematical topic.

MATH. 120 Fr. Levko
Topology 3 credits
(Prerequisite: Math 106) An introduction to point-set topology. Connectedness, compactness, separation axioms, and metric spaces.

MATH. 121 Fr. Levko
Complex Variables 3 credits
(Prerequisite: Math 106) The theory of complex variables: The calculus of functions of complex variables; Transformations; conformal mappings; residues and poles.

MATH. 130 Prof. Eichelsdorfer
Actuarial Mathematics 3 credits
(Prerequisite: Math 4 or 14) Theory of Interest, Measure, Accumulation, and Discount, Present and Future Value, Annuities, Perpetuities, Amortizations, Sinking Funds, Yield Rates.

MILITARY SCIENCE

LT COL. DEELY, *Chairperson*

Achievement is a byword at the University of Scranton and ARMY ROTC offers each student a chance to pursue achievement outside the regular academic curriculum. Participants in the program have been selected as Fulbright Fellows, Honors Program participants, leaders of campus organizations and scholarship winners. Their success did not end with graduation; many have gone on to careers in the Army, medicine, law and public service. The success of these cadets indicates the effectiveness of a program which is designed to challenge the students to expand their horizons by emphasizing leadership and service.

Students in all academic majors are enrolled in ROTC — from accounting to pre-med. The Department maintains a curriculum designed to complement any undergraduate program with instruction emphasizing leadership and management. Students are offered a chance to get something extra from college by having the opportunity to develop and use leadership skills.

Students are eligible to compete for ARMY Merit Scholarships which are available for 2, 3, and 4 year periods. These scholarships are available for high school seniors interested in ROTC for freshman and sophomores who may or may not be enrolled in the program. These scholarships pay all tuition and fees with an allowance for books and a tax free living allowance of up to $1000 per year. During academic year 1982-1983 20 ROTC cadets were on scholarship with an average total value of $5,300 per year to each student.

The ROTC program is designed so that freshmen and sophomores may participate without incurring any obligation for military service. The six credits available during these two years may be used to fulfill graduation requirements in the General Electives Free Area. In addition, students enrolled in Military Science may elect to fulfill one Physical Education requirement each year through ROTC.

Instruction is not bound to the classroom but emphasizes practical application in the field. Military history instruction includes trips to historical sites. Map reading and navigation include training in the field. The department also offers mountaineering and white water rafting training for those interested in a little adventure. Trips to military installations are offered for those students interested in seeing the Army first hand.

Students who missed the opportunity to take ROTC at the beginning of their freshman year are not excluded from participating in the program. Interested students may take courses during either the summer or intersession.

Ultimately, the student is offered a chance to compete for an appointment as a commissioned officer. This is done during the junior and senior years in that part of the program called the Advanced Course. All Advanced Course cadets receive a tax free living allowance of $100.00 per month during the school year and the Army supplies all uniforms and books for ROTC courses. You continue to have a choice during the Advanced Course; you may select the Active Army as a full-time career or the Army Reserve and National Guard as a means of serving part-time while you pursue a civilian career.

Students may qualify for the Advanced Course by completing the first two years of Military Science or by qualifying for Advanced Placement. Veterans, members of the Army Reserve and National Guard, and Junior ROTC graduates may qualify for Advanced Placement. Sophomores who missed the opportunity to participate in ROTC may qualify for the Advanced Course by attending a paid six week training session at Fort Knox, KY

Students interested in post-graduate education may request a delay of their military service and scholarships are available for selected graduate programs. Each year cadets go on to medical, law and other graduate programs. Three graduates of the ROTC program are now attending medical school on full Army scholarships.

M.S. 11-12

Military Science I 2 credits

These courses will introduce the student to the United States Army, the various branches and the function of each. The student will also be introduced to tactics, marksmanship and weapons. (GE AREA FREE)

M.S. 21-22

Military Science II 4 credits

Introduction to land navigation, including use of the compass and topographic maps. First aid, to include CPR. (CPR certification may be available dependent upon student interest) A survey of leadership theory, to include leadership models, group dynamics and role playing. (GE AREA FREE)

M.S. 101
Military Science III 2 credits
(Prerequisite: MS 21-22 or equivalent) A course emphasizing advanced land navigation, tactics and applied leadership. An introduction to the international agreements governing armed forces, operational planning and the functions of command and staff. (GE AREA II)

M.S. 102
Military Science III 1 credit
A course designed to prepare the student for the ROTC Advanced Camp. The emphasis is on applied small unit leadership, physical conditioning, practical training on military equipment, tactics and unit drill. (GE AREA II)

M.S. 10-20
Leadership Laboratory 0 credits
A course designed to stress the practical application of classroom theory. The emphasis is on working in a group with cadets alternating in leadership positions. Subjects to be highlighted are drill and ceremonies, marksmanship, basic mountaineering, land navigation and tactics.

M.S. 121
Military Science IV 2 credits
The Army Officer in Contemporary Society. An introduction to professionalism and ethical decision making skills using case studies. The goal of the course is to provide the student with an understanding of the soldier's responsibility to the nation and a greater awareness and sensitivity to ethical issues. Selected pre-commissioning skills are reviewed during the semester. (GE AREA II)

M.S. 122
Military Science IV 1 credit
An introduction to the Military Justice system to include searches, seizure, investigations and military trials. The course also reviews the Army personnel, training and logistics management systems. (GE AREA II)

NOTE. Students desiring to pursue Military Science studies through to a commission are also required to complete Hist. 149, American Military Heritage, or its equivalent. This requirement may be met during any semester.

AEROSPACE STUDIES

LT. COL. ROBERT F. CAFAZZO, *Chairperson*

The Air Force Officer Training Corps (AFROTC) program is designed to prepare students to become officers in the United States Air Force. The objective of AFROTC at Scranton is to teach students the skills and attitudes necessary to be a professional military officer.

A student may elect to enroll in either a four-year or two-year AFROTC program. A four-year cadet enrolls in the General Military Course (GMC) during the first two years of college and the Professional Officer Course (POC) during the last two years of college. This program is open to all incoming freshmen or individuals with four years of college remaining. The two-year program is open to all students who have two academic years remaining at either the undergraduate or graduate level or a combination of the two. Two-year cadets must apply for POC entry early in their sophomore years. The Air Force will provide all GMC and POC members with uniforms, equipment, and textbooks for AFROTC work.

Students who successfully complete the POC are commissioned as second lieutenants in the United States Air Force. They serve on active duty in the Air Force for a minimum of four years and are assigned duties in their career specialty or other areas such as pilot, missile, or navigator.

Presently, only GMC classes are offered on the University of Scranton campus. These classes are designed to provide a general knowledge of the role, organization, missions, and historical development of U.S. airpower.

A.S. 101-102
U.S. Military Forces in the Contemporary World 2 credits
These courses examine background, missions, and functions of U.S. military forces, with emphasis on U.S. Air Force organization, doctrine, and forces.

A.S. 201-202
The Development of Air Power 2 credits
These courses trace the historical evolution of airpower to the present. Emphasis is on changes in missions, concepts, technology, and employment of airpower in support of national objectives.

NURSING

DR ROSELLEN GARRETT, *Chairperson*

The purpose of the Baccalaureate nursing program is the preparation of qualified persons for entry-level practice of professional nursing in hospitals and community health settings. The program also provides the academic foundation for advanced study in nursing.

High school graduates are admitted as freshmen into the program which leads to a Bachelor of Science degree with a major in nursing. Total class enrollment is limited in consideration of educational and clinical resources. The curriculum can be completed in eight regular semesters of full-time study on four academic years. Students are encouraged to enroll in general education courses during January intersession and summer sessions to reduce the fall and spring term schedules. Transfer students will be considered on a space available basis.

The nursing curriculum is approved by the Pennsylvania State Board of Nurse Examiners. The curriculum is based on a planned progression of courses so arranged as to build upon and develop knowledge and skills at levels of increasing competency Therefore, all required courses must be taken in sequence.

For progression through the nursing program a minimum grade of C must be attained in the prerequisite natural science courses (Chemistry 13-14, Biology 125, Mathematics 44) and in each nursing course.

Prior to the junior and senior year, students enrolled in the nursing program must present a certificate as evidence of having completed the Cardiopulmonary Resuscitation Basic Life Support course or Modular course offered by the American Red Cross or the American Heart Association.

In addition to the general University tuition and fees listed in the Student Expenses section, students majoring in nursing assume the responsibility for the following: uniforms and other required clinical accessories, yearly physical examinations, biennial eye and dental examinations, immunizations, comprehensive/achievement tests, liability insurance and any travel expenses incurred. Students must also provide their own transportation to and from agencies utilized for clinical laboratories, and have access to a car during their Community Health laboratory in the senior year.

Upon graduation the students will be eligible for admission to examination for the registered nurse licensure.

The department of Nursing holds membership in the Council of Baccalaureate and Higher Degree programs of the National League for Nursing

NURS. 10 Staff
Family Health 3 credits
(For non-nursing majors.) Concepts and principles related to the promotion and maintenance of optimal family health. Considers factors pertinent to health needs and health practices throughout the life cycle. (GE AREA I).

NURS. 11 Staff
Fundamentals of Health Care 2 credits
(For Physical Therapy majors only.) Introduction to selected principles and techniques of health care such as assessment of vital signs, body movement and alignment, asepsis, that are basic to safe client care and applicable to the practice of physical therapy. 1 hour lecture, 2 hours laboratory.

NURS. 12 Staff
Introduction to Nursing Concepts 3 credits
(Prerequisite: Sophomore status in Nursing Program) An exploration of the core concepts of the client, health, nursing and health patterns. Historical, philosophical and social development of nursing and the role of the professional nurse presented. Understanding of health and health continuum in the broader perspective of the human person, the physiological, psychological, developmental, and sociocultural modes. Introduction of the nursing process as it relates to the development of cognitive, interpersonal, and psychomotor skills to assist clients to attain and maintain an optimal level of health 3 hours lecture.

Dr. Rosellen Garrett
Chairperson

NURSING CONCENTRATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
COGNATE	Chem. 13-14	Introductory Chemistry	4	4
COGNATE	Biol. 13-14	Structure & Function of the Human Body	4	4
GE AREA II	Psych. 23	Fundamentals of Psychology*		3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			18	18
		SOPHOMORE		
MAJOR	Nurs. 12	Foundations of Professional Nursing	3	
MAJOR	Nurs. 14	Nursing I		6
COGNATE	Biol. 125	Intro. Medical Microbiology	3	
COGNATE	Math 44	Computational Statistics		3
GE AREA II	Soc. 127	Medical Sociology*	3	
GE AREA II	Psych. 26	Theories of Personality*	3	
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 110-132	Ethics — Medical Ethics*	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19	19
		JUNIOR		
MAJOR	Nurs. 101-102	Clinical Pathology I-II	3	3
MAJOR	Nurs. 103	Nursing II	9	
MAJOR	Nurs. 104	Nursing III		9
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS	Elective	3	
			18	15
		SENIOR		
MAJOR	Nurs. 121	Nursing IV	9	
MAJOR	Nurs. 123	Research in Nursing	3	
MAJOR	Nurs. 124	Nursing V		9
GE AREA V	T/RS-Phil.	Elective		3
GE FREE	Electives	Electives	3	3
			15	15
			TOTAL:	137 credits

*Departmental Recommendation.

NURS. 14 Staff
Nursing Related to Health Patterns 6 credits
(Prerequisite: Sophomore status in the nursing program) Development of beginning psychomotor and assessment skills necessary for the promotion of optimal health as a care-giver. Focus on the professional nurse's role in assessing and diagnosing the developmental, physiological, psychological, and sociocultural dimensions of adaptive health patterns in individuals with a stable health status. 4 hours lecture and 6 hours laboratory.

NURS. 101 Prof. Castor
Clinical Pathology Related to Health Patterns I 3 credits
(Prerequisite: Chemistry 13-14, Biology 13-14, Biology 125) Physical and psychosocial adaptations in response to illness in clients. Concepts dealing with self perceptions-self concept, sleep-rest, and activity-exercise health patterns are explored and related to specific alterations in clients' health status; relationship of nutrition and pharmacology to pathophysiology and psychopathology. 3 hours lecture.

NURS. 102 Prof. Castor
Clinical Pathology Related to Health Patterns II 3 credits
(Prerequisite: Clinical Pathology 101) Physical and psychosocial adaptations in response to illness in clients. Concepts dealing with nutrition-metabolic, sexuality-reproductive, role-relationship, elimination, and cognitive-perceptual health patterns are explored and related to specific alterations in clients' health status; relationship of nutrition and pharmacology to pathophysiology and psychopathology. 3 hours lecture.

NURS. 103 Staff
Nursing II Nursing the Individual 9 credits
(Prerequisite: Nursing 12, Nursing 14, Corequisite: Nursing 101) Focus on the professional nurse's role as care-giver, advocate and teacher in restoring the physiological and psychosocial adaptive responses of the individual experiencing alternations in the health patterns of self perception-self concept, sleep-rest and activity-exercise. Emphasis placed on the planning and implementation of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 104 Staff
Nursing III Nursing the Individual/Family 9 credits
(Prerequisite: Nursing 103; Corequisite: Nursing 102). Focus on the professional nurse's role as care-giver, advocate and teacher in restoring adaptive responses of the individual and family experiencing alternations in health patterns of sexuality-reproductive, nutrition-metabolic, role-relationships. Emphasis placed on the planning and implementation phases of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 121 Staff
Nursing IV Nursing the Individual/Family Community 9 credits
(Prerequisite: Nursing 104) Focus on the professional nurse's role as care-giver, advocate and teacher in promoting and restoring adaptive responses of the individual, family and community experiencing alternations in the health patterns of elimination, cognitive-perceptional, coping-stress-tolerance and value-belief. Emphasis placed on the planning and implementation phases of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 123 Dr. Bailey
Research in Nursing 3 credits
(Prerequisites: Senior status in the nursing program, Math 44). Introduction to and application of the principles and process of research in professional nursing practice. Study of research design, data collection technique, interpretation and critique of nursing research literature and reports and the development of the ability to become a discriminating consumer of nursing research. 3 hours lecture.

NURS. 124 Prof. M. McCarthy
Synthesis of Nursing Concepts 9 credits
(Prerequisite: Nursing 121) Focus on the professional nurse's role as leader/manager in promoting, restoring and maintaining adaptive responses in individuals experiencing complex alternations in health patterns. Continued use of the nursing process to implement and to evaluate nursing care of the individual, family, community and groups in collaboration with the nursing and interdisciplinary health teams. 2 hours lecture and 21 hours laboratory.

PHILOSOPHY

DR. NORDBERG, *Chairperson*

The basic objectives of the Philosophy Department may be stated as follows:

1) To inspire the student to come to grips with the basic philosophical problems implicit in the experience of the self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality);

2) To lead the student to develop habits of clear, critical thinking within the framework of both an adequate philosophical methodology and accepted norms of scholarship;

3) To introduce the student to reading critically the great philosophers, past and present;

4) Finally, through this entire process, to help the student to formulate for himself or herself a satisfactory philosophy of life or world-view. Hopefully, such a formulation will ground both one's own search for fulfillment as a free person and one's meaningful contribution to the world community. In this fashion the Department exercises the specifically illuminating and unifying functions of philosophy as set forth in the basic objective of liberal education adopted by this University.

For the AB degree in Philosophy, the major must take 24 upper division credits in Philosophy in addition to the six credits required of all students. As part of this 24 credits the student must take in senior year a seminar for philosophy majors. The remaining 21 credits must be distributed as follows: logic (3); history of philosophy (6); thematic or problem-centered courses (6); free (6).

Classified as history of philosophy: Phil. 27, 108, 113, 114, 117, 121, 122, 123, 125, 131, 142, 144, 145, 149, 159.

Classified as thematic or problem-centered: Phil. 27, 104, 105, 106, 107, 108, 112, 119, 124, 125, 126, 131, 132, 133, 136, 137, 139, 140, 144, 145, 146, 147, 148, 156.

PHIL. 20 Staff
Introduction to Philosophy 3 credits

The purpose of this course is to awaken the beginning student to the basic questions and answers available in philosophy. Contemporary methods are used to understand both current and classical philosophical literature. While important professional texts are used, this course is kept flexible enough to allow the individual professor to develop his own approach to philosophical problems.

PHIL. 27 Dr. McGinley
Dialectical Logic 3 credits

In a survey fashion this course will: a) examine generically the relationship between logic and philosophy; and, b) examine the meaning which dialectical logic has had in the history of philosophy. This survey will be followed by an intensive training in the later Platonic dialogues. *Sophist, Statesman,* and *Parmenides* are the texts.

PHIL. 28 Dr. Capestany
Logic: The Art of Communication 3 credits

This course will center on a study of the principles of critical thinking, fallacies, degrees of certitude, syllogistic reasoning, language and thought. The practical aspect of logic as it applies to life will be stressed rather than the formal system of logic.

PHIL. 104 Dr. McGinley
Epistemology 3 credits

An historical and analytical examination of the problem of knowledge within the context of the problem of truth. Areas of investigation are authentic and unauthentic thinking and verbalization; the relationship between thought and language; the relationship between thought and experiencing; the critical status of the fundamental positions on the problem of ultimate truth.

PHIL. 107 Drs. Garrett, Capestany
Philosophy of Law 3 credits

A study of the various justifications of law and their implications. Special consideration will be given to the problems of civil disobedience and the force of law in private institutions.

PHIL. 108 Drs. Baillie, McGinley
Metaphysics 3 credits

A textual inquiry into the adequacy of philosophers' answer to the fundamental question, "What is?". Special attention will be given to Plato, Aristotle, Aquinas, Kant's critical philosophy, and the issues of nature and history.

PHIL. 110 Staff
Ethics 3 credits

A philosophical study of man's moral experience in terms of his meaning as a person. Themes investigated will include freedom of choice and its limitations in moral responsibility, problems of conscience, the meaning of moral value, the norm of morality, natural obligation and human rights and their implications for social involvement of the person and his relation to authority.

PHILOSOPHY CONCENTRATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Phil. 20-110	Introduction — Ethics	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Foreign Language*	3	3
GE AREA III	Communications	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 21	Introduction to Theology	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			13	16
		SOPHOMORE		
MAJOR	Phil. 28 — Elec.	Logic — Thematic Elective	3	3
MAJOR	Phil. Elec.	History of Philosophy Elective		3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Social/Behavior	Electives	6	6
GE AREA V	T/RS	Theology/Religious Studies Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Philosophy	Thematic and Free Electives	3	3
MAJOR	Philosophy	History of Philosophy Elective		3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil.-T/RS	Philosophy/Religious Studies Elective	3	
GE FREE	Intd.	Interdisciplinary Elective		3
			18	18
		SENIOR		
MAJOR	Philosophy	Elective — Major Seminar	3	3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Elective		3
GE FREE	Electives	Electives	6	3
			15	15

TOTAL: 127 credits

*Departmental recommendations are indicated by an asterisk.

In the Cognate area of 24 hours, the department requires that 12 credits be focused in one field. It should be noted that six credits not required by the department in the Major area are added to the Free Area in senior year. These may be taken in any field including philosophy.

MINOR. A minor in philosophy consists of 18 credits i.e. the 6 credits required of all students and 12 additional credits to be chosen by the student.

PHIL. 111 Dr Black
Philosophy of Art
This inquiry into the nature, scope, and significance of art examines such questions as. What is the relation between art and feeling? art and imagination? art and entertainment? Is art merely frivolous and ornamental? Or does it, like science, bring important knowledge into view?

PHIL. 112 Dr. Garrett
Logical and Rhetorical Analysis 3 credits
A study of the principles of logic and persuasion, an analysis of fallacies, the principles of structure in written and oral composition. Practice in briefs and abstracts with an emphasis on exactness and clearness. (GE Area III)

PHIL. 113 Dr. Nordberg
Ancient Philosophy 3 credits
The Pre-Socratics, Plato, Aristotle and their immediate successors. Special emphasis on the Theory of Knowledge, the Metaphysics and Philosophical Anthropology of Plato and Aristotle.

PHIL. 114 Dr. Capestany
Medieval Philosophy 3 credits
The origin and character of medieval philosophy, early Christian Philosophy, the controversy of the universals, outstanding thinkers of the early scholastic period and the influence of Islamic and Jewish philosophy.

PHIL. 115 Drs. Capestany, Garrett
Philosophy of Aquinas 3 credits
Significance of Aquinas' incorporation of Aristotelianism into the Christian West in the 13th century. Importance of his synthesis of philosophy and theology. Examination of his metaphysics, anthropology and ethics. His relevance to the world.

PHIL. 117 Fr. Mohr
Existentialism 3 credits
A critical study of key concepts in existential philosophy through selective works of Kierkegaard, Sartre, Marcel, and Jaspers. Emphasis is placed on the concepts of self and knowledge.

PHIL. 121 Dr. Klonoski
Modern Philosophy I 3 credits
The Renaissance Background: Petrarch and the humanist movement: Galileo and the beginnings of modern science. Descartes: mathesis universalis; the diffficulties of the Cartesian method; solution in the one substance of Spinoza. British Empiricism: Locke and the problem of substance; Berkeley's 'Esse est percipi', culmination in Hume and the doctrine of perceptual atomism.

PHIL. 122 Fr. Mohr
Modern Philosophy II 3 credits
Leibniz: Cartesian and Spinozistic heritage, the problem of universal science; the Monodology Kant: influences of Leibniz, Hume and Newton; the "Copernican revolution" and "Transcendental Criticism". Fichte's transcendental idealism and Schelling's absolute idealism. Hegel and Phenomenology of Mind; reality as dialectical. Survey of later trends: Schopenhauer, Nietzsche, Bergson.

PHIL. 123 Dr. Fairbanks
Foundations of 20th Century Philosophy 3 credits
A study of some of the key figures that have set the tone for the 20th Century philosophy. Buber, Marx, Kierkegaard, Hume, and Russell are studied in detail.

PHIL. 125 Fr. Mohr
Language and the Existence of God 3 credits
A study of methods of expressing God's existence in language, this course will examine the proofs for existence of God in Anselm, Thomas Aquinas, and Descartes, analyze Kant's criticism and Hegel's reevaluation of such proofs, and reflect on modern theories of language about God.

PHIL. 126 Dr. Capestany
Idea of a University 3 credits
An investigation of the philosophy of a liberal education, using John Henry Newman's *Idea of a University* as a tool.

PHIL. 131 Dr. Baillie
Political Philosophy 3 credits
Philosophical and ethical analysis of the social nature of man with emphasis on modern social questions. Ethics of the family, of nation and of communities. International ethics.

PHIL. 132 Drs. Garrett, Carlson
Medical Ethics 3 credits
(Prerequisite: Philosophy 110) The ethical aspects of abortion, euthanasia and preservation of life, sterilization and contraception, artifical insemination, experimentation on human beings, hypnosis, electroshock therapy and psycho-surgery. Recommended for premedical students.

PHIL. 133 Drs. Klonoski, Garrett, Black
Business Ethics 3 credits
(Prerequisite: Philosophy 110) The personal and social ethics of the major areas of decision making in business principles and case work will receive equal stress. Recommended for business majors.

PHIL. 134 Dr. Baillie
20th Century Political Philosophy 3 credits
The philosophical origins and development of the major political alternatives, including democracy, socialism, communism, and fascism.

PHIL. 137 Fr. Gannon
Phenomenology of Human Ambition 3 credits
Philosophical study of action, vitality, goals, human appetite, human greatness. The lives of Janis Joplin, Hitler, Vince Lombardi and Ignatius Loyola.

PHIL. 139 Fr. Gannon
Philosophy of Sexuality 3 credits
What is the natural purpose of sexuality? What need is there in the individual for sexual activity? What norms can be derived for ethical sexual behavior?

PHIL. 140 Fr. Gannon
The Appetites and Passions 3 credits
A "sensate culture" seems, paradoxically, to be an apathetic culture. Human drives and dreams, a matter of importance to philosophers from Aristotle to Sartre, in the light of the whole man, who is indeed much more than drives.

PHIL. 144 Dr. McGinley
Plato and Pleasure 3 credits
An investigation into and analysis of the pleasure dialogues of Plato. Special attention will be accorded to Lysis, Protagoras, Gorgias, Book IX of Republic and Philebus.

PHIL. 145 Fr. Jarvis
Mysticism East and West 3 credits
Prayer as found in the great Eastern and Western Christian mystical writers. What distinguishes mysticism as an epistemology distinct from other general philosophical tendencies will be studied.

PHIL. 146 Fr. Jarvis
The Philosophy of Christian Healing 3 credits
Biblical basis and Christian experience of healing physical, emotional and spiritual ills performed by the Christian community. This is understood to complement the professional work done in the various health fields. The philosophy of the American Idealist, Josiah Royce, will be considered for certain philosophical reflections.

PHIL. 154 Dr. Capestany
Philosophy of History
This course considers three fundamental aspects. First, the ultimate causes of the historical facts (philosophy of history); second, the ultimate causes of the knowledge of those facts (philosophy of the science of history); and finally, a study of the unification of these two in man, reality, and theology.

PHIL. 155 Dr. Fairbanks
Philosophy of Science 3 credits
An introduction to the history and philosophy of science. Selections from Darwin's *The Origins of Species* (1859) and *The Descent of Man* (1871) and Popper, Feyerabend, Hanson, Stace, Quine, Frank, Rescher, Hempel and Baier.

PHIL. 156 Dr. McGinley
Freud and Philosophy 3 credits
Examination of overt and covert philosophical implications of Freud's system of psychoanalysis. Emphasis on actual writings of Freud, particularly after 1920.

PHIL. 159-T/RS 153 Drs. Nordberg, Benestad
Great Books I-II 3-6 credits
Major thinkers in the Western philosophical, religious, political and literary traditions. First semester covers, classical thought, Hebrew scriptures, early Christian literature and medieval thought. Second semester covers Renaissance, Enlightenment and contemporary thought. First semester for theology credit; second for philosophy credit.

PHIL. 160 Dr. Fairbanks
New Directions in Philosophy
The purpose of this course is to use very recent works that develop major philosophical concepts to explain current and possible future roles in human behavior. A course of this type must be constantly updated. However, some of the following books will be used: *The Third Wave, Megatrends, The Fifth Generation, The Hidden Injuries of Class, The Tao Jones Averages, The Aquarian Conspiracy, The Tao of Physics* and *In Search of Excellence.*

PHIL. 190 Staff
Major Seminar 3 credits
For Seniors only, required for all majors. A concentrated investigation of an author or thematic problem.

PHYSICAL EDUCATION

DR. WODDER, *Chairperson*

The Physical Education Department aims to improve the physical fitness level of each student and improve and increase students' recreational skills. Emphasis is placed on instruction in a wide variety of popular sports, recreational and competitive athletics, especially those with carry-over value for post college years.

Physical Education is required two periods per week through the freshman and sophomore years. One credit hour is granted in Physical Education each semester.

Every regularly enrolled freshman and sophomore student except veterans must satisfy the Physical Education requirement unless excused by the Physical Education Department.

It is possible to be excused from the Physical Education classes by application to the Physical Education Department if (a) a physician certifies that a student, for medical reasons, should not engage in vigorous physical activity; (b) a student is a member of an intercollegiate varsity team; (c) the department deems it advisable; (d) veterans.

Grading: S — Satisfactory
U — Unsatisfactory, requiring repetition of course
These grades will not be computed in the Quality Point Index.

Physical Education 1 credit

Students taking physical education may elect from the following: tennis, swimming, yoga, racquetball, weight training, slimnastics, basketball, volleyball, bowling, running, riflery, pistol, karate, self-defense for women, judo, advanced life saving, ballet and modern jazz dance. Four credits are needed for graduation.

PHYS. ED. 108 Prof. Bessoir

High School Coaching 3 credits

Especially useful for those who wish to teach and coach high school, this course is concerned with coaching psychology, organization, training and taping, and fundamentals of sports among other topics. (Applicable only to FREE AREA of General Education Program.)

John J. Long Athletic Center

PHYSICAL THERAPY

DR. SIMON, *Chairperson*

The department offers an educational program leading to the Bachelor of Science degree in Physical Therapy which blends professional studies with a broad general education. The curriculum is designed to prepare students for entry-level practice with a foundation of knowledge, ideals and values for productive participation in the profession of physical therapy.

The program is accredited by the American Physical Therapy Association and graduates are eligible for admissions to licensure examinations required for practice in the United States.

Admission to a prerequisite two years of pre-professional studies is competitive and normally restricted to the freshman class. Total class enrollment is limited in consideration of clinical resources.

The program's professional phase begins in the junior year. It includes both academic and clinical components arranged sequentially for the progressive development of competencies needed for: patient evaluation, treatment planning and implementation, clinical problem-solving, interpersonal communication, and administration of physical therapy services. Experience in direct patient care is provided with active physical therapy services located in local and regional health care institutions and agencies.

Advancement to professional studies is automatic for pre-professional students who satisfy the following criteria: completion of all specified pre-professional prerequisite and general education requirements; attainment of a minimum grade of C in all natural science and department courses specified by the pre-professional curriculum; attainment of an overall C+ average; documentation of a minimum two-weeks experience with an active physical therapy service and positive recommendation from the services ranking physical therapist; positive evaluation of personal abilities and aptitudes by faculty responsible for department courses included in the pre-professional curriculum; and documentation of completion of Allied Health Professions Test administered by The Psychological Corp.

Completion of general education courses during January Intersessions will be necessary to reduce fall and spring term schedules. All professional students will be required to complete clinical field experiences and internships specified. Related costs of liability insurance, uniforms, travel, meals, and temporary housing are the responsibility of individual students.

PT 100 Dr. Simon
Health and Health Care Systems 2 credits
Study of health care delivery in the United States. Identification and discussion of current issues. Professional roles and interrelationships of selected health related occupations are considered.

PT 101 Prof. Pellino
Introduction to Physical Therapy 3 credits
Overview of historical development, philosophic and legal foundations, and contemporary practice of Physical Therapy in the United States. Current practice sites and settings are reviewed with consideration of traditional and emerging roles and responsibilities of the physical therapist. Introduction to treatment cycle and basic patient management techniques. Pre-professional physical therapy students only. 2 hours lecture, 2 hours lab.

PT 102 Prof. Nardone
Physical Therapy Procedures I 3 credits
Introduction to physical therapy procedures. Problem-oriented patient evaluation and treatment planning is emphasized through coordinated classroom and clinical case-study approach. Lectures and laboratory practice in selected evaluation techniques and therapeutic procedures. Management of pain and musculoskeletal dysfunctions is considered. Majors only. 1½ hours lecture, 3 hours lab.

PT 103 Prof. Nardone
Physical Therapy Procedures II 3 credits
Continuation of PT 102. Lectures and laboratory practice in selected evaluation techniques and therapeutic procedures. Management of amputees, open wounds, chronic pulmonary dysfunction, and peripheral vascular insufficiency is considered. Majors only. 1½ hours lecture, 3 hours lab.

PT 104 Prof. Kosmahl
Therapeutic Exercise I 3 credits
Integrated over-view of physiologic and theoretical bases for therapeutic exercise. CNS, neuromuscular, and cardiopulmonary responses to exercise are investigated. Physiologic principles of exercise for selected pathologies are introduced. Majors only. 2 hours lecture, 2 hours lab.

PHYSICAL THERAPY CURRICULUM

	Dept. and No.	Descriptive Title of Course	Credits		
		FRESHMAN	FALL	INT	SPRING
MAJOR	PT 100	Health & Health Care Systems	2		
COGNATE	Chem. 13-14	Introductory Chemistry	4		4
COGNATE	Biol. 13-14	Structure/Function Human Body	4		4
COGNATE	Math 13	Pre-calculus Mathematics		4	
GE AREA II	Psych. 23*	Intro. to Psychology*			3
GE AREA III	Communications	Elective**	3		
GE AREA IV	Humanities	Humanities Elective		3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3		
GE AREA V	T/RS 21	Introduction to Theology			3
			16	7	17
		SOPHOMORE			
MAJOR	PT 101	Introduction to Physical Therapy			3
MAJOR	PT 105	Anatomy for Physical Therapy			5
COGNATE	Physics 9-10	General Physics I-II	4		4
COGNATE	Biol. 120	General Physiology	4½		
COGNATE	Nursing II	Fundamentals of Health Care	2		
GE AREA II	H/HS 11	Foundations of Human Services†			3
GE AREA III	Communications	Elective**		3	
GE AREA IV	Humanities	Humanities Electives	6		3
GE AREA V	Phil. 110	Ethics		3	
GE AREA V	T/RS Elec.	Elective	3		
			19½	6	18
		JUNIOR			
MAJOR	PT 102-103	Physical Therapy Procedures I-II	3		3
MAJOR	PT 104-106	Therapeutic Exercise I-II	3		3
MAJOR	PT 108	Neuroscience	5		
MAJOR	PT 109	Field Experience I		1.5	
MAJOR	PT 110	Medical/Surgical Lectures I			2
MAJOR	PT 115	Introduction to Clinical Research			3
MAJOR	PT 120	Concepts in Pathology	2		
MAJOR	PT 121	Kinesiology and Pathokinesiology	4		
MAJOR	PT 123	Developmental Pediatrics			2
GE AREA V	Phil 132	Medical Ethics††			3
			17	1.5	16
Summer	PT 112	2 crds (4 wks @ 40 hrs. a week)			
		SENIOR			
MAJOR	PT 111	Medical/Surgical Lectures II	2		
MAJOR	PT 113	Administrative Seminar	1		
MAJOR	PT 114	Rehabilitation	5		
MAJOR	PT 117	Scientific Inquiry	2		
MAJOR	PT 122	Therapeutic Exercise III	5		
MAJOR	PT 199	Clinical Internships			8
GE AREA IV	Humanities	Humanities Elective		3	
GE AREA V	T/RS Phil.	Electives		3	
			15	6	8

TOTAL: 149 credits

*Psych. 23 is recommended; **Engl. 7 and Comm. 2 recommended.
†H/HS II, Foundations of Human Services is recommended.
††Phil. 132, Medical Ethics, is recommended.

PT 105 Dr. Mattingly
Human Anatomy for Physical Therapy 5 credits
In-depth study of gross human anatomy emphasizing structural and functional relationships of skeletal, muscular, circulatory, and nervous structures comprising the head, neck, trunk and extremities. Organic systems relevant to physical therapy practice are also examined. Human dissections are included. Majors only. 3 hours lecture, 4 hours lab.

PT 106 Prof. Kosmahl
Therapeutic Exercise II 3 credits
A continuation of topics introduced during PT 104 (traditional forms of therapeutic exercise and physiologic rationale for their use; therapeutic exercise for selected pathologies). Major emphasis on therapeutic exercise for musculoskeletal dysfunction and on orthopaedic physical therapy evaluation are presented. Manual therapy (mobilization) and spinal traction are included. Majors only. 2 hours lecture, 2 hours lab.

PT 108 Dr. Mattingly
Neuroscience 5 credits
(Prerequisite: Physical Therapy 105) Examination of the development and gross and cellular organization of the nervous system in man with consideration of its physiologic properties and probable mechanisms of information reception, transmission, and integration at spinal, supraspinal and cortical levels. Concepts of normal sensory-motor integration and neural center influence on motor activity and postural control will be reviewed. Clinical manifestations of dysfunctions relevant to physical therapy practice will be discussed. Majors only. 4 hours lecture, 2 hours lab.

PT 109 Prof. Nardone
Field Experience I 1½ credits
(Prerequisite: Physical Therapy 102) Introduction to physical therapy practice. On-site observations and practice of selected behaviors and procedures with patients in local treatment facilities and settings. Majors only.

PT 110 Dr. Malloy, Prof. Kosmahl
Medical/Surgical Lectures I 2 credits
(Prerequisites: Physical Therapy 120) Physician lectures providing an overview of selected diseases and disorders commonly referred for physical therapy evaluation and treatment. Relevant medical and surgical interventions will be reviewed with consideration of their implications for patient management. Emphasis on musculoskeletal disorders and rheumatic diseases. Majors only.

PT 111 Dr. Aronica, Prof. Pellino
Medical/Surgical Lectures II 2 credits
(Prerequisite: Physical Therapy 120) Continuation of PT 110. Physician overview of selected diseases and disorders commonly referred for physical therapy evaluation and treatment. Emphasis on referrals by neurologists, neurosurgeons, cardiologists, dermatologists, and thoracic surgeons. Majors only.

PT 112 Prof. Nardone
Field Experience II 2 credits
(Prerequisites: Physical Therapy 103 and 109) Intermediate physical therapy practice. Practice of selected behaviors and procedures with patients in local treatment facilities and settings.

Dr. James Simon,
Chairperson, Dept. of Physical Therapy

PT 113 Prof. Nardone
Administrative Seminar 1 credit
Introduction to management process. Application of management principles and practices to a variety of physical therapy services. Majors only.

PT 114 Prof. Steppacher
Rehabilitation 5 credits
Introduction to contemporary philosophy and scope of rehabilitation. Evaluation of functional abilities and capabilities with an appreciation for rehabilitation potential. Laboratory implementation of treatment plans for physical conditioning and for specific goals of functional training for selected conditions and disabilities; i.e., amputee, chronic neuromuscular disease and arthritis, head trauma, spinal cord injury and C. V. A. Introduction to activities of daily living with an appreciation for architectural barriers in home and community settings. 3 hours lecture, 4 hours lab.

PT 115 Dr. Simon
Introduction to Clinical Research 3 credits
Introduction to statistical concepts, principles and methods for physical therapy clinical research. A nonrigorous approach is employed with emphasis on practical application of content to relevant clinical data. Majors only.

PT 117 Dr. Simon
Scientific Inquiry 2 credits
(Prerequisite: Physical Therapy 115) Analysis of research reported in relevant professional literature. Design, implementation and interpretation of simple research study of individual interest with preparation of written report. Majors only.

PT 120 Dr. Mattingly
Concepts in Pathology 2 credits
(Prerequisite: Physical Therapy 105, Corequisite: Physical Therapy 108) Introduction to basic principles of pathology with emphasis on disease concepts and mechanisms relevant to physical therapy practice. Majors only.

PT 121 Prof. Kosmahl
Kinesiology and Pathokinesiology 4 credits
(Prerequisite: Physical Therapy 105; corequisite: PT 104 and 108) Comprehensive study of normal human movement, and movement dysfunction associated with selected forms of pathology. Actions of individual muscles and muscle groups on skeletal joints are reviewed and biomechanical factors discussed. Normal and pathological gaits are studied. Majors only. 3 hours lecture, 2 hours lab.

PT 122 Prof. Pellino
Therapeutic Exercise III 5 credits
(Prerequisites: Physical Therapy 106 and 121) Introduction to evaluation of movement disorders and treatment with neuromuscular disorders and treatment with neuromuscular re-education techniques. Overview of selected exercise theories and principles. Laboratory practice of related techniques. Majors only. Three hours lecture, 4 hours lab.

PT 123 Prof. Pellino
Developmental Pediatrics 2 credits
Comprehensive study of principles of development and developmental patterns of the infant and young child. Integration of growth and development concepts in assessment, program planning, and treatment delivery for infants and children with developmental disabilities and neuromotor dysfunction. Emphasis is placed on age-related expectations and recognition of deviations from normal in the physical, psychomotor, and perceptual areas of behavior. Majors only. 1 hour lecture, 2 hours lab.

PT 199 Staff
Clinical Internships 8 credits
(Prerequisites: Physical Therapy 114 and 122) Intensive clinical practice on a full-time basis for a 4-8 week period in each of three physical therapy treatment facilities or settings. Emphasis is placed on development of increased independence in the management of patients. Majors only.

PHYSICS/ELECTRONICS ENGINEERING

DR. FAHEY, *Chairperson*

The department offers concentrations in Physics, Biophysics, Electronics Engineering and Electronics-Business. The objectives of the department are to provide skills, understanding, and the methodology required to initiate active participation in the development of new knowledge about the material universe. The approach of the physical scientist and engineer, based as it is on the analysis of mathematical models dealing with matter and energy and their interactions, supplies a unique and important insight to the solution of problems in many disciplines

A 1982 study by the office of institutional research at Franklin and Marshall College shows that over the last 60 years, the University of Scranton ranked 24th out of 867 four-year, private, primarily undergraduate institutions as the baccalaureate origin of physics doctorates In addition, the biophysics concentration in recent years has regularly produced students admitted to medical school.

PHYSICS MAJOR

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Physics 11-12	Elements of Physics I-II	4	4
COGNATE	Math 13-14 *or*	Pre-Calculus Math.-Calculus I *or*		
	Math 14-21	Calculus I-II	4	4
GE AREA III	Communications	Elective*	3	
GE AREA II	Social/Behavioral	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			15	15
		SOPHOMORE		
MAJOR	Physics 21-22	Elements Modern Physics — Statistics	4	3
COGNATE	Math. 21-22 *or*	Calculus II-III *or*		
	Math 22-101	Calculus III — Differential Equations	4	4
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			18	17
		JUNIOR		
MAJOR	Phys. 104-105	Electricity and Magnetism I-II	4	4
MAJOR	Phys. 123-110	Mechanics — Atomic/LASER Physics	3	3
COGNATE	Math. 101-Phys. 118	Differential Equations — Mathematical Physics	4	4
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS	Theology/Religious Studies Elective		3
			17	17
		SENIOR		
MAJOR	Phys./EE	Electives	3	3
MAJOR	Phys. 121	Physics Research	1	1
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE ARE V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Elective — Intd.	Elective — Interdisciplinary Elective	3	3
			16	13

TOTAL: 128 credits

*The Department recommends Comm. 2 (Oral Communication), Engl. 7 (Written Communication) and in fall semester of sophomore year, CMPS 20 (FORTRAN 77) for GE AREA III.

ELECTRONICS ENGINEERING MAJOR

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. The Electronics Engineering concentration prepares the student for the analysis and design of electronic devices whose principal functions are the shaping and control of information.

The office of career services reports that last year electronics engineers were offered the highest starting salaries of all University of Scranton graduates.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Phys. 11-12	Elements of Physics I-II	4	4
COGNATE	Math 14-21	Calculus I-II	4	4
GE AREA III	CMPS. 20	Intro. to Computer Sci.*	3	
GE AREA III	Communications	Elective*		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1	Basic Physical Education	1	
			18	17
		SOPHOMORE		
MAJOR	Phys. 21	Modern Physics	4	
MAJOR	Engr. 30	Intro. Digital Design	1	
MAJOR	Engr. 31	Digital Design		1
MAJOR	Engr. 32	Intro. CAD	1	
MAJOR	Engr. 33	Intro. Mech. Design		1
MAJOR	EE. 24	Circuit Analysis I		4
MAJOR	Engr. 21-23	Statics — Solid State Materials	3	3
COGNATE	Math. 22-101	Analysis III — Diff. Equations	4	4
COGNATE	Chem. 11-12	General Analytical Chemistry	3	3
GE AREA III	Communications	Elective*		3
GE AREA IV	Humanities	Elective	3	
			19	19
		JUNIOR		
MAJOR	Phys. 104-105	Elect. and Magn. I-II	3	4
MAJOR	EE. 106-107	Elect. Principles & Circuits I-II	4	4
MAJOR	EE. 112	Electronic Instrument Design		4
COGNATE	Phys. 118	Mathematics Physics I	4	
GE AREA II	Social/Behavioral	Elective		3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS	Elective		3
			17	18
		SENIOR		
MAJOR	EE. 108	Large Scale Integration Devices	4	
MAJOR	EE. 109	Communications Engineering	3	
MAJOR	Elective	Electronics Design Project or Physics Electives	3	3
MAJOR	EE. 110	Digital Interface		4
MAJOR	EE. 114	Microprocessor Assembly Language	3	
GE AREA II	Social/Behavioral	Electives	3	6
GE AREA IV	Humanities	Electives		3
GE AREA V	Phil-T/RS	Electives	3	3
			19	19

TOTAL: 146 credits

*In Freshman year, for GE AREA III (Communications), the Department recommends Engl. 7 (Writing Center) and CMPS 20; Oral Communication, Comm. 2 is recommended for sophomore year.

BIOPHYSICS

The Bio-Physics major is designed to prepare a student to apply the physical and mathematical sciences to problems arising in the life sciences and medicine. By proper electives, the student can prepare to enter graduate study of bio-physics, biology, bio-chemistry, medicine or dentistry.

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Biol. 1-2	General Biology 1-2	4½	4½
MAJOR	Physics 11-12	Elements of Physics I and II	4	4
COGNATE	Math. 13-14 *or* Math. 14-21	Pre-Calculus Math — Calculus I *or* Calculus I-II	4	4
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16½	16½
		SOPHOMORE		
MAJOR	Phys. 21-22	Modern-Statistical Physics	4	3
MAJOR	Biology or Chem.	Electives	4	4
COGNATE	Math 21-22 *or* Math 22-101	Calculus II-III *or* Calculus III — Diff. Equations	4	4
GE AREA III	Communications	Electives*	6	3
GE AREA IV	Humanities	Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19	18
		JUNIOR		
MAJOR	Phys., Bio., Chem.	Elective	3	
MAJOR	Phys., Bio., Chem.	Elective		3
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Intd.	Interdisciplinary Elective	3	
			19½	19½
		SENIOR		
MAJOR	EE. 112 or EE. 24	Electronic Instr Design or Circuit Analysis I		4
MAJOR	Physics 184	Biophysics or Elective		3
MAJOR	Phys., Bio., & Chem	Electives	6	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Elective	6	
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
			18	16

TOTAL. 143 credits

*Department recommends Engl. 7, Writing, Comm 2, Oral Communication, and CMPS 20, FORTRAN 77 for GE AREA III electives.

ELECTRONICS-BUSINESS MAJOR

The state of the business world today is such that a major portion of its administrative effort must be geared to the supervision of persons engaged in complex technological processes often involving applications of electronics. As a consequence, the ideal administrator is now one who is conversant with both good business practice and technological know-how.

The Electronics-Business major provides a student with a program of carefully selected business and economics courses coupled with a series of coordinated physics and electronics engineering courses so as to provide preparation for an administrative career in an electronically oriented business enterprise. The program also provides sufficient preparation for further studies leading to either the Master of Science in Solid State Electronics or the Master's in Business Administration.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Phys. 11-12	Elements of Physics	4	4
COGNATE	Math. 13-14 *or* Math 14-21	Pre-Calculus Math. — Calculus I *or* Calculus I-II	4	4
GE AREA II	Econ. 11-12	Principles of Economics I-II*	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			15	15
		SOPHOMORE		
MAJOR	Acc. 3-4	Basic Financial, Managerial Acct.	3	3
MAJOR	Math. 104	Statistics		3
MAJOR	EE 24	Circuit Analysis I		4
COGNATE*	Math. 21-22 *or* Math 22-101	Calculus II-III *or* Calculus III — Diff. Equations	4	4
GE AREA III	Communications	Electives**	6	3
GE AREA IV	Humanities	Electives	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			17	18
		JUNIOR		
MAJOR	EE 106-107	Electronic Prin. and Circuits I-II	4	4
MAJOR	Mgt. 109	Intro. to Management Science	3	
GE AREA II	Soc./Behavior	Elective		3
GE AREA IV	Humanities	Elective	6	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS Elec.	Theology Elective	3	
GE FREE	Intd.	Interdisciplinary Elective		3
			16	16
		SENIOR		
MAJOR	Mgt. 108-Mar. 107	Organization & Management — Managerial Marketing	3	3
MAJOR	Fin. 110-Mgt. 115	Corporation Finance — Production and Operations Management	3	3
MAJOR	EE 112	Electronics Instrument Design		4
MAJOR	Physics 104	Electricity & Magnetism I	3	
GE AREA II	Social Science	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Electives	3	3
			18	16

*Departmental recommendation.

**Comm. 2, Engl. 7, and CMPS 20 recommended

TOTAL: 131 credits

PHYS. 2 Dr. Hussain
Astronomy of Stars and Galaxies 3 credits
Introductory course for non-science students. Basic ideas about birth and death of stars. Red giants, white dwarfs, neutron stars and black holes. Star clusters and galaxies. Observational basis for astronomy.

PHYS. 3 Dr. Hussain
Solar System Astronomy 3 credits
This course reviews for non-science students, the basic facts about the sun and planets. A historical treatment culminating in latest space probe data. Theories on origin of solar system are presented Opportunity for astronomical observation.

PHYS. 4 Dr. Connolly
Earth Science 3 credits
Introductory level course for non-science majors. Selected topics from geology and meterology: weather forecasting, ground and surface water, mountain building, volcanoes, earthquakes, plate tectonics and oceanography. Three hours lecture. No prerequisite.

PHYS. 6 Prof. Kalafut, Dr. Hussain
Energy and the Environment 3 credits
A course for non-science majors that emphasizes the various aspects of man's use of energy and changes in the environment that accompany that use. Sources of energy; the nature of the present energy and environmental crises and possible solutions; energy requirements of the future; conservation and alternate energy sources.

PHYS. 7 Prof. Kalafut, Dr. DiStefano
Everyday Physics 3 credits
Practically-oriented course for non-science majors correlating physical concepts with everyday problems encountered with electrical devices and automobiles so that students can effect simple maintenance and repairs.

PHYS. 9-10 Staff
General Physics 8 credits
(Prerequisite: Mathematics 13-14) General college course for pre-medical, pre-dental and biology majors. Mechanics, heat, electricity and magnetism, sound, light and modern physics. Three hours lecture and recitation and two hours laboratory.

PHYS. 11-12 Staff
Elements of Physics 8 credits
(Corequisite: Mathematics 14-21) Basic college course, employing methods of the calculus, for physics, electronics, mathematics, and chemistry majors. Mechanics and heat, sound, light, electricity and magnetism. Three hours lecture and recitation and two hours laboratory.

PHYS. 19 Dr. Fahey
Biophysics of Communication 3 credits
Designed primarily for Communication majors, this course considers waves, energy and information theory Chemical messages, biological information processing in audio, visual and internal modes, Brain lesions, input saturation and problems in communication.

PHYS. 21 Staff
Elements of Modern Physics 4 credits
(Prerequisite: Physics 12) Introductory Modern Physics course for physics and electronics majors; also recommended for other science students. Review of classical physics, introduction to atomic and nuclear physics. Three hours lecture and recitation and two hours laboratory.

PHYS. 22 Staff
Statistical Physics 3 credits
(Prerequisites: Physics 21, Mathematics 22) An intermediate course designed to show how the basic notions of atomic theory lead to a coherent conceptual framework capable of describing and predicting the properties of macroscopic systems consisting of many atoms or molecules. It provides an introduction to the subjects of Statistical Mechanics, Kinetic Theory, Thermodynamics, and Heat. Recommended for physics majors. Three hours lecture.

PHYS. 25-26 Dr. McGinnis
Role of Electronics in Communication 6 credits
Introduction to the fundamentals of Electronics Conversion of audio and visual information to electrical signals. Transmission and reception of A-M and F-M signals in radio and TV. Fundamentals of Color as applied to TV. Selected topics in digital communications. This course is designed for the Communications Major and assumes no previous training in Physics or Electronics (GE Area I).

PHYS. 103 Staff
Optical Electronics 3 credits
(Prerequisites: Physics 21, Math 101) An introduction to the principles of geometrical and physical

optics and their application to electronic devices. Topics to be covered include ray and wave optics in linear and non-linear media, waveguides and fiber optics, and the generation and detection of optical radiation. Three hours lecture.

PHYS. 104 Staff
Electricity and Magnetism I 3-4 credits
(Prerequisite: Physics 21; Math 101 may be taken concurrently) Analytical treatment of electrical and magnetic theory; electrostatic fields; direct currents and circuits; measurements; magnetism.

PHYS. 105 Staff
Electricity and Magnetism II 3 credits
(Prerequisites: Physics 104, Math 101) Electromagnetic induction, circuit transients, alternating current circuits, measurements, electromagnetic fields and waves.

PHYS. 110 Staff
Atomic and LASER Physics 3 credits
(Prerequisite: Physics 21 & Math 101) Intensive and quantitative treatment of modern atomic physics using the principles and techniques of quantum mechanics. The study of energy levels, pumping, feedback and transition rates in lasers. Required of physics majors and highly recommended elective for Electronics Engineers. Three hours lecture with optional laboratory.

PHYS. 118 Staff
Mathematical Physics I 4 credits
(Prerequisite: Math 101) Determinants and Matrices. Fourier Series. Laplace Transformations. Introduction to Partial Differential Equations and Boundary Value Problems. Special Functions of Physics, including Bessel Functions, Legendre Polynomials, etc.

PHYS. 121 Staff
Undergraduate Physics Research variable credit
Recommended for senior physics students who pursue a specific physical research project to gain experience with research literature, techniques and equipment. Projects are recommended by members of the department and approved by the Chairperson. Written report required.

PHYS. 123
Advanced Mechanics 3 credits
(Prerequisite: Math 101) Comprehensive course in Newtonian dynamics, Variational principles, Lagrange's and Hamilton's equations; theory of small oscillations and specialized non-linear differential equations in mechanical systems.

PHYS. 153 Staff
Mathematical Physics II 3 credits
Functions of a Complex Variable. Infinite Series in the Complex Plane. Theory of Residues. Conformal Mapping. Fourier and Laplace Transforms. Advanced Partial Differential Equations. Boundary Value Problems in Physics. Green's Functions.

PHYS. 155 Dr. Fahey
Acoustics 3 credits
(Prerequisite: Phys. 118) This course covers the fundamentals of vibration as applied to one, two and three dimensional systems with varied boundary conditions. Transmission, absorption, attenuation, and radiation are covered. Resonators and waveguides and filters are studied in detail, and the fundamentals of transducers are studied to the depth desired by those enrolled in the course. The acoustics of hearing and the transduction from sound to neural signal in the auditory periphery will be examined in some detail.

PHYS. 184 Dr. Fahey
Biophysics 3 credits
(Prerequisite: Physics 22) Introduction to the theory of transport phenomena that are significant both in the living cell and in the physical characterization of bio-macro molecules form the standpoint of statistical mechanics and nonequilibrium thermodynamics. Molecular resonance phenomena are also covered. Three hours lecture.

ENGR. 21 Staff
Engineering Mechanics-Statis 3 credits
(Prerequisite: Physics 11; Corequisite: Math 21) Various types of force systems; resultants and conditions of equilibrium; stress analysis of the parts of different types of structures by graphical, algebraic and vector methods; frictional forces; centroids, and second moments of areas and solids.

ENGR. 22 Staff
Engineering Mechanics-Dynamics 3 credits
(Prerequisite: Engineering 21; Corequisite: Math 22) Kinematics of particles and rigid bodies which includes linear, curvilinear, angular and relative motions; inertia, forces, impulse, momentum, work, energy and power; mechanical vibrations.

ENGR. 23
Solid State Materials Science 3 credits
(Prerequisite: Physics 21, Corequisite: Math 101) Quantum statistics; band theory of solids; application to p-n junctions, bipolar and field effect transistors; dielectric, magnetic and optical properties of solids.

ENGR. 30 Dr Spalletta
Elementary Digital Design 1 credit
(Prerequisite: None) Introduction to the design of combinational and sequential digital logic circuits. A heavy emphasis will be placed on computer simulation of simple digital circuits. Two hours laboratory.

ENGR. 31 Dr. Spalletta
Intermediate Digital Design 1 credit
(Prerequisite: Engr. 30, Engr. 32) Computer aided design and analysis of digital circuits. Design criteria including displays, hardware and packaging will be discussed. Two hours laboratory

ENGR. 32 Dr. Connolly
An Introduction to Computer Aided Design 1 credit
(Prerequisite. Math 14, Computer Science 20) This course is an introduction to the methods of drafting and design using computer aided techniques. Topics to be covered include plane geometry constructions, projection theory, sectional views, dimensioning, tolerancing and the development of working drawings. Extensive use will be made of commercially available CAD software packages. Two hours laboratory.

ENGR. 33 Dr. Connolly
An Introduction to Mechanical Design 1 credit
(Prerequisites: Engineering 21 and Engineering 32) An introduction to the design of structures and machines using the principles of mechanics and strength of materials. Topics to be covered include force analysis, stress, strain, tension, compression, shear, bending of beams, elastic and inelastic properties of materials. CAD techniques will be emphasized in the design process. Two hours laboratory.

EE. 24 Staff
Circuit Analysis 4 credits
(Prerequisite: Physics 21) Intermediate course treating Kirchoff's Laws, resistance networks, steady state and transient condition in RC, RI, and RLC networks, Thevenin's and Norton's Theorems, and simple electronic devices and their equivalent circuits. Three hours lecture and two hours laboratory per week.

EE. 105L Dr. Spalletta
Electromagnetics Design Laboratory 1 credit
(Prerequisite: Phys. 104; Corequisite: Phys. 105) Laboratory designed to emphasize and reinforce the experimental basis of Electromagnetism. Multi-week projects require the student to design experiments to measure the electrical and magnetic properties of matter, and the properties of electromagnetic waves. Two hours laboratory.

EE. 106 Dr. McGinnis
Discrete Electronics Devices 3 credits
(Prerequisites: EE-24, Math 22) Physical principles of diode and transistor semiconductor devices. Introduction to the design of low and high frequency amplifier circuits.

EE. 106L Dr. McGinnis
Discrete Devices Design Lab 1 credit
(Prerequisite: EE. 24L) Experiments with diodes, BJT, FET, and MOSFET transistor. Some of the experiments will be short project types to introduce student to the application of design principles.

EE. 107 Dr. Spalletta
Digital Logic Circuits 3 credits
(Prerequisite: EE. 106) Combinational and Sequential Logic Circuits. Boolean Algebra, Karnaugh Maps, and State Machine methods of analysis will be discussed. The use of VLSI circuits including RAM and ROM memories and microprocessors will be investigated with a special emphasis on instrument design.

EE. 107L. Dr. DiStefano
Digital Logic Design Laboratory 1 credit
(Prerequisite: None) Introduction into the design, construction and testing of digital logic circuits. Most of the major components of a computer will be investigated Two hours laboratory.

EE. 108 Dr. DiStefano
Very Large Scale Integration Devices 4 credits
(Prerequisite: EE. 107) Computer-aided design of student project VLSI circuit.

EE. 109 Staff
Communications Engineering 3 credits
Introduction to information theory, encoding and decoding information, spectral properties of transmission lines, encoders, and decoders. Digital communications strategies and digital and analog modulation techniques. Noise and statistical properties of information.

EE. 110 Dr. Spalletta
Digital Instrument Design and the Computer Interface 4 credits
(Prerequisites: EE. 107 and 114) A review of digital circuits; microprocessor programming and interfacing; data acquistion, manipulation and transmission, microprocessor support devices, and common computer interfaces. The laboratory portion of course centers on design construction and utilization of a state of the art computer controlled instrument. 2 hours lecture and 4 lab.

EE. 112 Dr. McGinnis
Electronic Instrument Design 4 credits
(Prerequisite: EE. 24 and Math 101) Laboratory oriented course designed to acquaint Electronic Engineering students with the operation and design characteristics of electronic instrumentation. Analysis of existing electronic instruments used in various sciences as well as design of special instrumentation. Emphasis on use of operational amplifiers in design situations. Two hours lecture, four hours laboratory.

EE. 114 Dr. DiStefano
Microprocessor Assembly Language 3 credits
(Prerequisites: CMPS 20) Assembly language programming of an industrial microprocessor. Programs are written on a microprocessor trainer using hexidecimal notation. (The cross assembler course CMPS 100 may be taken in lieu of this.)

EE. 120 Staff
Linear Control Theory 3 credits
(Prerequisite: EE. 24) The theory of feedback linear control systems. Analysis of regions of stability using Laplace Transforms.

EE. 122 Staff
Senior Electronics Design Project 6 credits
Students work with a faculty advisor or a practicing electronics engineer to consider realistic, generally unsolved problems from current technology Projects involve creative conception, design, development and evaluation. Written and oral presentation of the subject before a group of faculty.

POLITICAL SCIENCE

Dr. DeMICHELE, *Chairperson*

The Bachelor of Science degree program in political science aims to accomplish the following objectives: 1. to give the student a thorough understanding of the nature and purposes of civil society; 2. to impart a sound knowledge of the philosophical basis of democracy; 3. to enable the student to appreciate the problems of his or her own government at work; and 4. to relate the American system to the governments of other states in the international community.

POLITICAL SCIENCE

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Pol. Sci. 11-12	Intro. to Political Science I-II	3	3
COGNATE	Hist. 1-2	United States History	3	3
COGNATE	Math. 1-2	Math. Discovery I-II	3	3
GE AREA III	Communications	Elective*		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
GE FREE	Elective	Elective	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Hist. 3-4	Europe: 1500 to the Present	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Theology/Religious Studies Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Pol. Sci. 114	Western Political Thought		3
MAJOR	Pol. Sci.	Electives**	3	6
COGNATE	Soc. Sci.	Social Science Elective	3	
COGNATE	Pol. Sci. 133	Political Science Statistics	3	
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy or Theology/Religious Studies		3
GE FREE	Elective-Intd.	Elective-Intd.	3	3
			15	18
		SENIOR		
MAJOR	Pol. Sci.	Electives	6	6
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives	6	6
GE AREA V	Phil.-T/RS	Philosophy or Theology/Religious Studies		3
			15	15

TOTAL: 127 credits

*As Communications elective in GE AREA III, the department recommends Comm. 2, English 7, Comm 162, and Comm. 165. For GE AREA IV Humanities electives, the department recommends Hist. 122-23, 142-3. In the GE FREE AREA, the department recommends a modern foreign language in junior year with subsequent language courses to follow in senior year as part of GE AREA IV (humanities). The departmental advisor should be consulted.

**Pol. Sci. 136 (Statistics II) is recommended as elective in spring semester of junior year, particularly for students planning on graduate school or law school.

PUBLIC ADMINISTRATION-PUBLIC AFFAIRS

Intended to improve society by providing professional and pre-professional training for men and women who seek careers as agency administrators, program directors, staff analysts in local, state or federal government, or other public service organization, the public affairs/public administration major is also specially suited for those who wish to pursue graduate studies in law, political science, business, planning development.

Analytical and quantitative skills are developed in combination with a firm background in the social and behavioral sciences in order to provide: 1. substantive knowledge of a range of societal problems, the unique political environment in which the problems exist, and management systems for achieving implementation of policy decisions; 2. management skills in the areas of motivation of leadership, organizational management, personnel management and program evaluation; 3. sensitivity to values of public interests, equal rights, economic, social, cultural and religious institutions.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Pol. Sci. 5-6	Introduction to Public Administration	3	3
GE AREA I	Math 1-2	Math Discovery	3	3
GE AREA III	Communications	Communications Electives*	3	3
GE AREA IV	Humanities	Electives***	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA V	T/RS 21	Belief and Unbelief	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
COGNATE	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Pol. Sci. 133-136	P.S. Statistics I & II	3	3
COGNATE	Econ. 11-12	Principles of Economics	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Electives	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Pol. Sci. 131-108	Public Law—Legislative Processes	3	3
MAJOR	Pol. Sci. 105-106	State Government-Local Government	3	3
MAJOR	Pol. Sci. 183	Public Personnel and Organization	3	
COGNATE	Acc. 3-4	Financial & Managerial Accounting	3	3
COGNATE	Soc. 21	Principles of Sociology		3
GE FREE	Elective-Intd.	Elective—Interdisciplinary	3	3
			15	15
		SENIOR		
MAJOR	Pol. Sci. 112	Politics of the Budgetary Process	3	
MAJOR	Pol. Sci. 186	Public Policy Analysis		3
MAJOR	Pol. Sci. 195	Practicum/Internship		3
MAJOR	Pol. Sci. Electives	Electives**	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives***	6	6
GE AREA V	Phil.-T/RS	Elective	3	
			18	15

TOTAL: 127 credits

*Department recommends Comm. 2 & Engl. 7 for AREA III Electives.

**Major electives to be selected in consultation with advisor.

***Department recommends History 1-2 & History 3-4 for AREA IV Electives.

INTERNATIONAL STUDIES

A major in International Studies seeks to provide the student with a full recognition and understanding of the multitudinous forces which shape the contemporary world—nationalism, wars, political and economic ideologies, cultural differentials, and modern technology. Such a broad knowledge and understanding of world affairs can be utilized in careers in teaching, international business, the legal profession, journalism, the Foreign Service of the United States, and other government agencies.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	History 1-2	United States History	3	3
COGNATE	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Language	Elementary or Intermediate	3	3
GE AREA III	Communications	Communications Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA V	T/RS 21	Introduction to Theology	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	History 3-4	Europe: 1500 to Present	3	3
MAJOR	Pol. Sci. 111-130	Internatl. Rel.—Ecopolitics	3	3
GE AREA II	Economics 11-12	Modern Economic Society	3	3
GE AREA III	Language	Intermediate or Advanced	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	T/RS Elective**	3	
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	History or Pol. Sci.	Electives*	6	6
COGNATE	Electives	Electives†	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA V	Phil.-T/RS	Electives**	3	3
GE AREA	Intd.	Interdisciplinary Elective		3
			15	18
		SENIOR		
MAJOR	H/P.S. 180	Seminar		3
MAJOR	History or Pol. Sci	Electives*	3	
COGNATE	Electives	Electives†	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA FREE	Elective	Elective		3
			15	15

TOTAL: 127 credits

*Major electives to be selected from P.S. 115. P.S. 116, H/P.S 120, H/P.S 121, P.S. 140, P.S. 134, H/P.S. 148, Hist. 151, H/P.S. 152, Hist. 161, Hist. 162, P.S 175, H/P.S 176, H/P.S 179, H/P.S 180, Hist. 182, Hist 183

**Department recommends T/RS 178 and 179 as AREA V electives.

†Department recommends cognate electives be used if needed to complete a language sequence up to the advanced level; otherwise, it is recommended that they be used for appropriate course sequences in the School of Management such as Mgt. 108-Mgt. 168, Mar. 107-Mar. 167; or additional course work in economics/finance, for which AREA II electives can also be applied.

MINORS

A minor in **Political Science** (18 credits) should include Pol. Sci. 11, 12, 101 and 102 plus any two additional political science courses.

A minor in **Public Administration** (18 credits) should include P.S. 5, 6, 101 and 102 plus any two additional courses from the following: P.S. 105, P.S. 106, P.S. 108, P.S. 112, P.S. 131, 133, P.S. 183 and P.S. 186.

A minor in **International Studies** (18 credits) should include History 1 and 2, Pol. Sci. 101 and 102 plus two additional courses from the following: P.S. 111, P.S. 116, H/P.S. 120, H/P.S., 121, P.S. 130, P.S. 134, P.S. 140, H/P.S. 148, Hist. 151, H/P.S. 152, Hist. 161, Hist. 162, P.S. 175, H/P.S. 176, H/P.S. 179, H/P.S. 182 and H/P.S. 183.

POL. SCI. 5 Dr. Champney
Introduction to Public Administration I 3 credits
Introduction to the study of the public bureauracy. Issues of organization, staffing and financing are considered. The politics of budgeting and of bureaucratic behavior.

POL. SCI. 6 Dr. Champney
Introduction to Public Administration II 3 credits
(Prerequisite: Pol. Sci. 5) Introduction to the analysis of public policies. Problems in the innovation, implementation and evaluation of public programs are analyzed. PPBS and alternative budgeting systems.

POL. SCI. 11 Staff
Introduction to Political Science I 3 credits
An introduction to the major concepts, goals and philosophical foundations of political inquiry, including description of the scope of contemporary political science and its sub-fields.

POL. SCI. 12 Staff
Introduction to Political Science II 3 credits
Inquiry into political institutions and processes of industrial democracies; Communist state systems; and developing nations.

POL. SCI. 101-102 Staff
American National Government 6 credits
An analysis of society, state, authority, and common good. Forms of government. The constitution, federalism, structure, operations and functions of the three branches.

H/PS 103 Dr. Feller
Saving America's Past 3 credits
An introduction to the problems of the changing urban-suburban environment. Using Lackawanna County as a model study region, the issues of urban planning, architectural recycling, historic preservation and citizen awareness will be explored. Approach: walking tours of Scranton and surrounding communities.

POL. SCI. 104 Prof. Scully
The American Presidency 3 credits
An examination of the political process by which the American Chief Executive is selected, as well as the scope of authority and powers identifiable in the office.

POL. SCI. 105 Prof. Scully
State Government 3 credits
The natural constitutional position of the states and the changing federal-state relationships. State governments in actual operation. Emphasis on Pennsylvania and actual problems of procedure and policy.

POL. SCI. 106 Prof. Scully
Local Government 3 credits
Types and evolution of local government; constitutional and statutory limitations; functions of divisions; structure and operation.

POL. SCI. 107 Staff
Special Topics in Public Administration 3 credits
An inquiry into the new organizational theory; management dynamics; recent developments affecting administrative policy-making such as collective bargaining.

POL. SCI. 108 Dr. Dougherty
American Legislatures 3 credits
An investigation into the legislative process at both federal and state levels. Special attention is given to the structure for decision-making; partisan and interest-group influences; executive and judicial interactions.

POL. SCI. 110 Dr. Dougherty
Introduction to American Law 3 credits
An inquiry into the major theories of jurisprudence; development of American legal theory and practice; structure, functioning, and contemporary problems of the federal and state court systems.

POL. SCI. 111 Staff
International Relations 3 credits
A survey of workings in the nation-state system; power politics; equilibrium mechanisms; organizational functionalism; Third World.

POL. SCI. 112 Prof. Scully
The Politics of Budgetary Process 3 credits
An in-depth analysis of the procedures, forms and

decisional process involved in the preparation of governmental budgets. Emphasis placed on the development of the national budget and executive department lobbyists.

POL. SCI. 114 Staff
Western Political Thought 3 credits
The roles of state and society, the auxiliary agencies and functions of government as viewed by political philosophers from Plato to Marx.

POL. SCI. 115 Dr. Dougherty
Modern Political Thought 3 credits
A study of the theoretical foundations of the three major political idea-systems identified with the twentieth century; communism, fascism and democracy.

POL. SCI. 117 Prof. Scully
Regulatory Process 3 credits
An inquiry into the modes of federal and state regulation of business practices in the public interest.

H/PS 120-121 Dr. Hueston
American Diplomatic History 6 credits
(See description under History.)

H/PS 122-123 Prof. Scully
American Constitutional and Legal History 6 credits
(See description under History.)

H/PS 124-125 Prof. Scully
American Political and Social Thought 6 credits
(Recommended for background: History 1 & 2) An inquiry into the major philosophies which helped shape our institutions. Puritan concepts; view of the independents; pre-Revolutionary society and thought and the notion of independence; the Constitution as it represents a compromise between the conservative and liberal traditions; Jeffersonian and Jacksonian democracy; social, economic, and political ramifications of the slavery question.

POL. SCI 126 Prof. Scully
The Political Parties of the United States 3 credits
The origins, nature and functions of parties under our American system of government.

POL. SCI. 127 Prof. Scully
American Intergovernmental Relations 3 credits
A comprehensive treatment of all aspects of intergovernmental relations including regional and sectional as well as federal-state, federal-local and state-local.

POL. SCI. 128 Staff
Special Topics in Political Science 3-6 credits
Study and analysis of selected topics in the field of Political Science. The particular topic or topics will vary from year to year depending on the instructor and changing student needs.

POL. SCI. 130 Dr. Dougherty
Ecopolitics 3 credits
The economic, ecological, energy, environmental, and ethical issues of the shift emerging in international relations

POL. SCI. 131 Dr. Dougherty
Administrative Law 3 credits
Administrative decision-making by quasi-legislative and/or quasi-judicial agencies; legally-protected rights of persons and corporate entities; appellate review of administrative determinations; use of case method.

POL. SCI. 133 Dr. Champney
Political Science Statistics I 3 credits
Discussion of the principles, concepts and rationale which underlie the "scientific" approach to the study of political phenomena. Introduction to the quantitative and statistical research strategies which this approach has generated, including simple contingency table analysis, the chi squared statistic and the gamma statistic.

POL. SCI. 134 Dr. Dougherty
Comparative Government 3 credits
A representative sampling of foreign political forms and processes (including non-Western), as contrasted with those in the United States.

POL. SCI. 136 Dr. Champney
Political Science Statistics II 3 credits
(Prerequisite; P.S. 133) A detailed analysis of the quantitative and statistical research strategies which the "scientific" approach to the study of political phenomenon has generated, including simple correlation, partial correlation and multiple regression techniques.

POL. SCI. 137 Drs. Champney & Zurat
The Political Economy 3 credits
Examines the interrelationship between political and economic systems at the national and international level. Provides analysis of global and state economic theories, how politics influence markets and the distributive effects of public policy

POL. SCI. 138 Dr. Dougherty
Leaders and Elites 3 credits
Information and analysis of political elites and their leadership behavior; drawn form pluralist, transitional, and structured societies.

POL. SCI. 140 Prof. Williams
Geopolitics 3 credits
A study of geographic factors on World History. Geographic factors in national power and international relations; an analysis of the role of "Geopolitics" with reference to the current world scene.

H/PS 142 Dr. DeMichele
English Constitutional and Legal History to 1485 3 credits
Anglo-Saxon basis; fusion of Anglo-Saxon and Norman political institutions; Angevin innovations; Magna Carta; concept of representation; beginnings of the Common Law; jury system; content for government; emergence of Parliament; the refinement of government.

H/PS 143 Dr. DeMichele
English Constitutional and Legal History, 1485 to the Present 3 credits
Tudor absolutism; struggle between royal prerogative and Parliament; rise of the House of Commons; Parliamentary supremacy after 1688; development of Cabinet government; democratic reforms; Parliamentary Bill of 1911; extension of administrative law.

H/PS 148 Dr. Homer
War and Modern Society 3 credits
Role of military force in international relations; historical background focusing on wars, American and European, of 19th and 20th centuries; theories of function of war; arms control and deterrence of war.

H/PS 152 Dr. Earl
Soviet Foreign Policy 3 credits
Examination of the course of Soviet Foreign Policy from 1917 to present. Analysis of forces, factors and motives that have molded Soviet history and its relations with other nations.

POL. SCI. 155 Prof. Scully
The Chief Justices 3 credits
An examination of tenures of the Chief Justices of the United States. Special emphasis will be given to the major decisions of each tenure and the impact the decisions have on American Constitutional Doctrine.

POL. SCI. 175 Dr. DeMichele
Contemporary World Problems 3 credits
Focus on major problems which continually confront world in modern times. US. problems emphasized: war, violence, poverty, ecology.

H/PS 176 Dr. DeMichele
World Politics 3 credits
Deals directly with the political, economic, and social issues that are current in international affairs including the future possibilities of world order and the crises of foreign policy-making.

H/PS 180 Prof. Williams
Seminar in International Studies 3 credits
Required for International Studies majors. Other advanced undergraduates may take course with permission of the professor.

POL. SCI. 181 Dr. Champney
Political Behavior 3 credits
Social and economic factors which shape the relationship between individual citizens and their institutions of government. Emphasis on mass political behavior in the U.S. and the factors which shape electoral participation and interest group involvement.

POL. SCI. 183 Dr. Zurat
Public Personnel and Organizational Structure 3 credits
An examination of the personnel process, including testing, interviewing, affirmative action and the civil service, and how the personnel functions interact with the design and functioning of the organizational structure.

POL. SCI. 184 Dr. Zurat
Business and the Planning Process 3 credits
The interrelationship of the private and public sectors in areas such as land use, capital improvements, government regulations and the physical planning process. Local, regional and statewide planning issues are analyzed.

POL. SCI. 186 Dr. Champney
Public Policy Analysis 3 credits
Analysis of the functions and methods of the public sector and a discussion of the effect of public sector activities on society and the economy of the United States. Particular emphasis is placed on "public problem vs. private problems" and on the desirable scope of governmental activities in a free society.

H/PS 188 Drs. Earl, DeMichele
Ethnic & Racial Minorities in Northeastern Pennsylvania 3 credits
(See description under History.)

POL. SCI. 195 Staff
Political Science Internship 3-6 credits
Designed to broaden the educational experience of students by providing practical experience for them with various public agencies and institutions. Supervision by faculty member and agency supervisor.

PSYCHOLOGY

DR. O'MALLEY, *Chairperson*

The faculty in Psychology seeks to: 1. prepare students with a basic, systematic knowledge of psychological method and content, and 2. provide students with scholarly preparation for a wide variety of graduate programs in psychology and related professions as well as BS entry-level positions. According to a recent study by Franklin and Marshall College, the University of Scranton ranks in the top 6 percent among comparable institutions nationally in terms of students who go on to earn doctorates in psychology.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Psych. 23-Elective*	Fund. of Psych.-Elective	3	3
COGNATE	Math. 3-4 or 13-14	Quant. Meth. I-II or Pre-Calc. and Anal. I	3/4	3/4
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Phil. & Theo.	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16/17	16/17
		SOPHOMORE		
MAJOR	Psych. 24-30	Stat. 1—Res. Meth.	3	5
MAJOR	Electives*	Elective-Elective	3	3
COGNATE	Science Electives**	Elective-Elective	3	3
GE AREA II	Electives	Elective-Elective	3	3
GE AREA III	Communications	Elective	3	
PHYS EDUC	Ph. Ed. 23-24	Physical Education	1	1
			16	15
		JUNIOR		
MAJOR	Electives*	Electives-Electives	6	9
COGNATE	Elective	Electives	3	6
GE AREA II	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
			18	18
		SENIOR		
MAJOR	Psych. 151	History & Systems	3	
MAJOR	Elective*	Elective	3	
COGNATE	Elective	Elective		3
GE AREA II	Elective	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS-Phil.	Electives	3	6
GE FREE	Intd.-Elec.	Interdisciplinary-Elective	3	3
			15	18

TOTAL: 132/134 credits

Integrated programs are available with the School of Management or Department of Human Services; for more information consult your advisor

*Students must take a minimum of 2 courses in *Fundamental Psychological Processes* (142, 143, 147, 154); 2 of the first four courses listed in *Social & Developmental Processes* (126, 144, 145, 148, 149, 155, 157); 1 course in *Methods and Applications* (141, 146, 152, 158). Students are free to choose from any of these three areas to fulfill the remaining 4 course requirements in the major.

**Combinations of Biol. 3 & 4, or Biol. 107 and another Science elective are required.

FAMILY STUDIES MAJOR

The Family Studies major is an interdisciplinary major with a set of core courses in human development and basic social service skills designed to: 1) train students in the area of human and family development: 2) prepare students for BS entry level positions in human developmental service roles in such settings as pre-schools, day care centers, family service agencies, juvenile detention centers, institutions for the retarded and emotionally disturbed, institutions for the aged, and residential care institutions: 3) prepare students through the use of electives to develop the empirical skills necessary for further graduate education leading to professional positions.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Psych. 23-26	Fundamentals of Psych.— Personality Theories	3	3
COGNATE	Soc. 21	Introduction to Sociology	3	
COGNATE	H/HS 12	Phil. & Org. of Human Services		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Psych. 144-155	Childhood Adolescence — Adulthood & Aging	3	3
MAJOR	Psych. 145-FSTD 165	Abnormal Psychology — Dysfunctions in Childhood & Adolescence	3	3
COGNATE	Gero. 101	Introduction to Gerontology		3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci.	Natural Science Electives	3	3
GE AREA III	Communications	Communication Elective		3
GE AREA V	Phil. 110	Ethics	3	
PHYS EDUC	Ph. Ed. 23-24	Physical Education	1	1
			16	19
		JUNIOR		
MAJOR	Soc. Elec.-Psych. 24*	Sociology Elective — Statistics I*	3	3
MAJOR	Intd. 24-Elec.	Parenting — Elective	3	3
COGNATE	H/HS 101-102	Case Management* — Theories of Counseling*	3	3
GE AREA I	Nursing 10	Family Health*		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 135	Theology of Love and Marriage*	3	
			15	15
		SENIOR		
MAJOR	Fam. St. 11-Elec.	Consumer Economics — Elective	3	3
COGNATE	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS†	Electives†	3	3
GE FREE	Electives	Electives	3	6
			15	15

TOTAL: 127 credits

*Recommended Courses
N.B. Comm. 2 (Oral) and Engl. 7 (Written) are recommended as communication electives in freshman year.
†T/RS 136 and 162 recommended as electives.

MINOR. A minor in Psychology requires completion of the following courses: Psych. 23, Psych 24 (or an equivalent statistics course), Psych. 30, and two Psychology electives.

PSYCH. 23 Staff
Fundamentals of Psychology 3 credits
An introduction to the science of psychology with emphasis on the nature of behavioral data, learning paradigms, and assumptions underlying the fundamental principles of development and motivational-emotional processes. Introduction to, and familiarization with, the basic sources in psychology including journals and handbooks. Course requirements include participation in a psychological experiment or equivalent.

PSYCH. 24 Staff
Psychological Statistics I 3 credits
Descriptive statistics, correlation, regression, sampling, estimation.

PSYCH. 25 Staff
Human Behavior 3 credits
(Prerequisite Psych 23) The course is designed to increase the student's understanding of Human Behavior from the theoretical and applied points of view Course requirements include participation in a psychological experiment or equivalent Not intended for psychology majors

PSYCH. 30 Staff
Research Methods in the Behavioral Sciences 5 credits
(Prerequisites: Psych. 23 & 24) A survey of scientific method and research design in the behavioral sciences. Topics include: single subject, survey, correlational and experimental research. Labs involve supervised research, computerized data analyses and scientific writing Three credits lecture, two credits laboratory Lab Fee.

PSYCH. 126 Staff
Theories of Personality 3 credits
(Prerequisite: Psych. 23) A survey and critical evaluation of the major theories of personality and their implications for personality assessment, psychotherapy, and research.

PSYCH. 141 Drs. O'Malley and Norcross
Psychological Testing 3 credits
(Prerequisite: Psych. 23 & 24) Provides a thorough grounding in principles of testing and measurement; with a detailed study of variance as related to reliability and validity of tests.

PSYCH. 142 Dr. Cannon
Sensation and Perception 4 credits
(Prerequisite: Psych. 23 & 24) Concerns the experimental study of sensory mechanisms and perceptual phenomena. Supervised individual experimentation. Three hours lecture. Two hours laboratory Lab Fee.

PSYCH. 143 Dr. Dunstone
Conditioning and Learning 4 credits
(Prerequisite: Psych. 23 & 24) Concerns the experimental study of both classical and instrumental conditioning. Supervised animal and human experimentation. Two hours lecture. Four hours laboratory. Lab Fee.

PSYCH. 144 Dr. Buchanan
Childhood and Early Adolescence 3 credits
(Prerequisite: Psych 23) Survey of psychological research dealing with the development and behavior of children from infancy to adolescence. The physical, cognitive, and social aspects of development across age periods (prenatal, infancy, childhood, and early adolescence) with an emphasis on developmental theories

PSYCH. 145 Dr. Norcross
Abnormal Psychology 3 credits
(Prerequisite Psych. 23) The major theories, research, and issues in the description, classification, etiology, and treatment of abnormal behavior

PSYCH. 146 Dr. Dunstone
Psychological Statistics II 3 credits
(Prerequisite: Psych 24) An introduction to scientific method and experimental design. Emphasis is placed on the kinds and sources of error in experimentation, methods of control and design

PSYCH. 147 Dr Cannon
Physiological Psychology 3-4 credits
(Prerequisite Psych. 23) Introduction to the field of Neuroscience examining the cellular bases of behavior, effects of drugs on normal and abnormal behaviors, brain/body correlatives of motivation and emotion, neural changes accompanying pathology (e g , psychosis, learning disorders, stroke and senility Three hours lecture and optional two hour lab with lab fee

PSYCH. 148 Dr. Baril
Social Psychology 3 credits
(Prerequisite: Psych. 23) Social determinants of behavior from a psychological perspective. Topics include affiliation, conformity, persuasion and attitude change, person perception.

PSYCH. 149 Dr. Baril
Industrial Psychology 3 credits
(Prerequisite: Psych. 23) The psychological study of people at work. Topics include personnel selection and training, motivation, leadership, the physical work environment, and consumer behavior.

PSYCH. 150 Dr Baril
Research Methodology 3 credits
(Prerequisite: Psych. 23 & 24) Problems and issues in interpreting and designing research in the behavioral sciences. Single subject, survey, correlational and experimental research.

PSYCH. 151 Dr O'Malley
History and Systems of Psychology 3 credits
(Prerequisite: Psych. 23) Historical origins of various schools of thought and current views in psychology. Philosophical as well as empirical traditions are emphasized.

PSYCH. 152 Dr. Baril
Computer Applications in the Behavioral Sciences 3 credits
(Prerequisite: a statistics course, e.g. Psych. 24, Math 104, or Mgt. 15) An introduction to the application of computers in all areas of the behavioral sciences. This includes the computer analysis of data, preparation of manuscripts, control of measurement devices and recording of information. Specific areas to be covered will include the use of packaged statistical programs, graphic displays and word processing with personal home computers, microcomputers and minicomputers.

Psychology faculty with '85 graduates headed for advanced studies.

PSYCH. 154 Dr. Buchanan
Cognitive Psychology 3 credits
(Prerequisite: Psych. 23) This course will consider a number of approaches to the study of human cognitive processes with an emphasis placed on the information processing model. The course of human intellectual development will be discussed from early childhood to adulthood. A variety of topics will be covered including perception, attention, memory, language, reasoning, problem solving, and creativity.

PSYCH. 155 Dr. Buchanan
Late Adolescence, Adulthood and Aging 3 credits
(Prerequisite: Psych. 23) Survey of the psychological research dealing with the age graded aspects of behavior in adulthood. Course will consider the physical, cognitive, and social aspects of the aging process from late adolescence to death. Topics to be covered include such issues as occupation selection, marriage, parenthood, middle age, retirement, and dying.

PSYCH. 157 Dr Norcross
Clinical Psychology 3 credits
(Prerequisite: Psych. 23; recommended: Psych. 145) An examination of the history, strategies, practitioners, and status of contemporary clinical psychology. Community and empirical applications are emphasized.

PSYCH. 158 Dr Norcross
Field Experience in Clinical/ Community Psychology 3 credits
(Prerequisites: Psych. 145, 157 and permission of instructor) This course involves both classroom and field experience. The latter is obtained through placement at a mental health facility in the community. Supervision of students' placement is provided both at the agency and in the classroom.

PSYCH. 160-161 Staff
Undergraduate Research 6 credits
(Prerequisite: Psych. 30 and permission of professor) Individual study and research on a specific problem.

FAMILY STUDIES

FSTD 10 Mrs Babcock
Family Nutrition 3 credits
Fundamental nutrition principles. Definition of carbohydrates, fats, protein, minerals, vitamins in the diet. Family food planning, cultural food habits and food economics. Recommended dietary allowances and their application to different stages of the life cycle.

FSTD 11 Staff
Consumer Economics 3 credits
The place of the consumer in the economic system. Theories of consumption, consumption minima; problems of the individual consumer as affected by income, taxes; consumer habits and standards of living are investigated. A study is made of the trends in consumption, income disposition, and marketing and pricing of consumer goods.

FSTD 120 Atty Utan
Family Law 3 credits
The sources and applications of family law, the new constitutional family law, the creation of the marriage relationship which includes the nature of marriage, the substantive and formal requirements, the effects of non-compliance. Consideration given to parent-child relationship (i.e., abortion, legitimacy, illegitimacy, paternity, adoption, parental authority and custodial obligations, child support, child abuse and neglect, termination of parental rights, child custody on divorce.

INTD. 24 Staff
Parenting 3 credits
Integrating the disciplines of psychology and literature, this course is designed to increase one's capacity to be a good parent. Fiction is used as discussion source for learning about child development, family relations, and parent education.

FSTD 165 Staff
Dysfunctions in Childhood and Adolescence 3 credits
(Prerequisite: Psych 23) Considers atypical human development in areas of social, cognitive and physical development during adolescence and childhood and its impact on the family. Mental retardation, learning disabilities, physical handicaps, etc.

SOCIOLOGY

DR. RIELLY, *Chairperson*

Courses in Sociology seek to provide both the terminal student and the prospective graduate student with a basic understanding of the forces that are part of the social processes. In addition, the courses are designed to help the student interested in the field of Social Work or Social Welfare to attain a pre-professional orientation to these fields.

Students interested in Urban Planning are advised to include Soc. 106, 111, and 114 in their planning; for Social Work, Soc. 104, 106, 107, 109 and 114; for Medical Services/Administration, Soc. 127, Gero. 103, 105, 107; for Personnel Relations/Administration, Soc. 115, 148 and 150

The Department of Sociology/Criminal Justice also administers the Criminal Justice/Law Enforcement undergraduate major at the University, and the Gerontology Major.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	Soc. 21-22	Principles — Social Problems	3	3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Soc. 117-118	History of Sociological Thought I-II	3	3
MAJOR	Sociology	Electives	3	3
COGNATE	H/HS 11-Soc. Sci. Elec.	Foundations of Human Services — Elective	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Theology/Religious Studies Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Soc. Elec.	Sociology Electives	3	3
COGNATE	Pol. Sci.	Political Science Science Elective	3	
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Electives	Electives	3	3
			18	15
		SENIOR		
MAJOR	Soc. 191, 198, 199	Internship/Electives/Independent Study	3	3
COGNATE	Soc. Sci. Elec.	Electives	3	3
COGNATE	Hist./Pol. Sci.	History/ Political Science Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Elective — Intd.	Elective — Interdisciplinary	3	3
			15	15

TOTAL: 127 credits

In GE AREA I, the department recommends Biology 3 or 4. In GE AREA III, the department recommends Comm. 2, Engl. 7, and CMPS 21. In the COGNATE Social Science Electives, the department recommends a mix of Human Services, Law Enforcement, Gerontology, and Psychology electives, especially Psych 26: Theories of Personality; Pol. Sci. 133: Statistics I; and CJ 112; Criminological Research.

GERONTOLOGY CONCENTRATION

The degree program in Gerontology has the following objectives:

1. to understand the processes of aging; 2. to prepare for careers in agencies and institutions serving the aged, such as Area Agencies on Aging, Family Services, Long Term Care facilities, Telespond, etc; 3. to provide a liberal gerontology education with special emphasis on the development of the whole person; 4. to provide students with academic preparation for advanced study in gerontology, social work, public administration, social welfare, and related fields.

The Scranton area is especially suited to serve as a laboratory setting for gerontology education with its high proportion of elderly citizens and its many agencies and facilities for the aged. The Gerontology major is administered by the Department of Sociology.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Soc. 21-Gero. 101	Principles of Soc. — Intro. to Gerontology	3	3
COGNATE	Psych. 23-H/HS 12	Fundamentals of Psych. — Health/HS Interventions	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Gero. 105	Social Policy and Aging	3	
MAJOR	Gero. 126	Aging and Death		3
MAJOR	Gerontology	Electives	3	3
COGNATE	H/HS 11-Soc. 148	Case Management — Social Psychology	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS Elective	Elective		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Gero. 103-Elec.	Health and Aging — Elective	3	3
COGNATE	Psych. 155	Late Adolescence, Adulthood & Aging	3	
COGNATE	Soc. 114	Minorities and Aging		3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil-T/RS Elec.	Electives	3	3
GE FREE	Elective	Elective	3	
			18	15
		SENIOR		
MAJOR	Gero. 191, 198, 199	Internship/Electives/Indep. Study	3	3
MAJOR	Gerontology	Electives	3	3
COGNATE	Soc. Sci. Elec.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Elec.-Intd.	Electives — Interdisciplinary	3	3
			15	15

TOTAL: 127 credits

The Gerontology Internship may be taken in either the junior or senior years, or both (not to exceed a maximum of six credits of internship)

In GE AREA I, the department recommends Biol. 3-4 and FSTD 10: Family Nutrition. In GE AREA III, the department recommends Comm. 2 and Engl. 7. In the COGNATE as Social Science Electives, the department recommends H/HS 102, 103, 115, 116; Psych. 25, 26, 153, 155; Sociology 22, 106, 109, 127.

MINORS

Sociology. A minor in Sociology will require fifteen credits in sociology. There are two required courses: Soc. 21: Principles of Sociology, and Soc. 118: History of Sociological Thought II. The following elective courses are strongly recommended in the sociology sequence: Soc. 104: Cultural Anthropology, Soc. 111: Urban Sociology, Soc. 114: American Minorities, and Soc. 115: Sociology of Work and Professions.

Gerontology. A minor in Gerontology will require eighteen credits. There are three required courses: Soc. 21: Principles of Sociology; Gero. 101: Introduction to Gerontology; and Gero. 105. Social Policy and Aging. The following elective courses are strongly recommended by the department in the gerontology sequence: Gero. 103: Health and Aging; Gero. 107: Aging and Community; Gero. 110: Aging in Anthropological Perspective; and Gero. 126: Aging and Death.

SOC. 21 Staff
Principles of Sociology 3 credits
Fundamental principles in the field of sociology. Stratification, ethnicity, deviance. The basic institutions of society; social change and demographic trends.

SOC. 22 Staff
Social Problems 3 credits
Application of sociological principles to major issues in contemporary society.

SOC. 104 Dr. Rielly, Dr. Rynn
Cultural Anthropology 3 credits
Cultural and social organization among primitive or preliterate societies; marriage, property, religion, magic and tribal control. Significance of the study of primitive cultures for understanding of urban, industrial civilizations.

SOC. 106 Prof. Pryle
Community Organization 3 credits
A general introduction to the field and process of community organization, both as a field of social work and as a field of human endeavor. The coordination and financing of welfare activities, methods of appraising community needs and resources, planning and the initiation of welfare services. Services of a voluntary and governmental nature, strategies of power.

SOC. 107 Prof. Pryle
Child Welfare 3 credits
Development of child welfare in the United States. Educational, health, recreational and child labor regulations. Study and treatment of children in their own homes, foster homes and institutions. Child care and protective programs on federal, state and local level.

SOC. 109 Prof. Pryle
Introduction to Social Work 3 credits
Growth of social work as a professional endeavor. The scope of social work; casework in the medical, psychiatric, family and child welfare and guidance field, community organization as exemplified in the United Fund and Planning Council, social research, social planning, social group work. Current trends in social work.

SOC. 110 Dr. Rielly, Dr. Rynn
Marriage and the Family 3 credits
An historical, comparative, and analytical study of marriage and family institutions. Problems of courtship, mate selection, and marriage adjustment in modern society.

SOC. 111 Prof. Pryle, Fr. Conlin
Urban Sociology 3 credits
Urban ecology and culture as the dominant form of community life in contemporary society; its characteristics, peculiarities, and problems.

SOC. 114 Staff
American Minority Groups 3 credits
Patterns of adjustment between ethnic and racial groups, with special attention given to the American scene. Prejudice and discrimination as opposed to the democratic ideology.

SOC. 115 Dr. Talamini
Sociology of Work and Professions 3 credits
The nature and role of contemporary professions, occupational choice, career patterns and occupational mobility; the relationship between education, occupation, profession and aspiration.

SOC. 117 Fr. Conlin
History of Sociological Thought I 3 credits
Background and development of sociology with emphasis upon the men and ideas that strongly influenced the discipline; particular emphasis on the works of Comte, Durkheim, Weber, Simmel, Pareto and Marx, and on the social context in which they originated.

SOC. 118 Fr. Conlin
History of Sociological Thought II 3 credits
An examination of major current theoretical developments in sociological theory and a critical review of theories of leading contemporary sociologists.

SOC. 119 Fr. Conlin
Crisis in Population 3 credits
A study of the basic variables of population, birth, death and migration, socio-economic and cultural variables affecting population, growth, projections and forecasts. The chief natural and social demographic theories. Population policies and practices in selected world areas.

SOC. 121 Prof. Pryle
Religion and Society 3 credits
A survey of religious systems and their interrelations with society and social institutions, with emphasis on the social consequences and determinants of religious behavior. The theories of Durkheim, Weber, Parsons, Bellah, Berger and Luckman will be examined.

SOC. 124 Dr. Talamini
Sociology of Sport 3 credits
The role of sport in civilized societies; sport as work and recreation; women and minorities in sport; sport in education; sport and the mass media.

SOC. 127 Prof. Pryle, Dr. Talamini
Medical Sociology 3 credits
The social dimensions of health and illness; role of physician, nurse, and patient; social organization of health services; the content of medical practice; culture and health disorders; mental health and mental illness.

H/SO 134 Dr. Feller
Introduction to Archaeology 3 credits
An introduction to the study of archaeology from anthropological and historical perspectives. Areas to be explored include survey and site recognition, excavation planning, record keeping, treatment of artifacts and above-ground archaeology.

SOC. 135 Dr. Rynn
Peoples of East Asia 3 credits
The anthropology of the East Asian culture area, focusing particularly on China and Japan. Topics include basic social institutions, world views, culture and personality, and the problem of modernization.

SOC. 148 Dr. Rynn
Social Psychology 3 credits
Study of individual behavior as affected by cultural and social stimuli. Emphasis on the analysis of human conduct in social settings.

SOC. 150 Dr. Rynn
Industrial Sociology 3 credits
Modern industrialism as social behavior. Social conditions in the rise of industrialism and their effect on the worker; collective bargaining and industrial conflict, the industrial community; social classes and the industrial order.

SOC. 191-192 Staff
Independent Study in Sociology 3 credits
Designed for advanced students who are capable of independent study. A program of planned research under the guidance of a faculty member. Registration upon approval of Chairman of the Department and instructor directing the study.

SOC. 198-199 Dr. Rielly
Internship in Social Work 3 credits
Practicums designed to broaden the educational experience of students through practical experience and work assignments with governmental and/or community agencies in the field of social work. Supervision by a faculty member and agency supervisor. In selected cases a student may receive credit for part time paid experience. In either case, approval of mentor is necessary. Limited to juniors and seniors.

Approved courses from other curricula: sociology majors may be advised to choose several courses taught in the Criminal Justice sequence — Courses subject to such approval include:

S/CJ. 103 Criminology
S/CJ. 113 Juvenile Delinquency
S/CJ. 117 Sociology of Deviance
S/CJ 104 Victimology
S/CJ. 115 Organized Crime Patterns
S/CJ. 127 Probation & Parole
S/CJ. 123 Law and Society
S/CJ. 116 Crime, Deviance & Respectability
S/CJ. 128 Penology: Corrections
S/CJ. 132 The American Court System
S/CJ. 134 Trial, Jury and Counsel
S/CJ 146 Introd. Recreation & Leisure

GERO. 101 Dr Rielly, Prof. Pryle
Introduction to Gerontology 3 credits
A multi-disciplinary examination of the cognitive and affective aspects of the aging process. The course covers the social, physiological, psychological, economic, and health aspects of aging, as well as service delivery systems. It explores planning and action strategies aimed at enhancing the quality of life, and providing more adequate benefits and services for the elderly.

GERO. 103 Staff
Health and Aging 3 credits
An explorative study of the mental and physical health problems prevalent in the older adult population, with emphasis upon the preventive aspect of health care as applied by themselves and health care providers. Health care approaches appropriate to the various problems, and relevant resources within the home and community are considered.

GERO. 105 Prof. Pryle
Social Policy and Aging 3 credits
Review of major legislation affecting older adults, including Social Security Act, Older Americans Acts, Medicare, and various local, state, and national programs for the aged.

GERO. 106 Prof. Cimini
Crime and Aging 3 credits
Identification of a variety of legal issues and crimes which have particular impact on the elderly with attention to the ways the aged can use the legal process.

GERO. 107 Staff
Aging and the Community 3 credits
Consideration of selected community strategies and leadership in effecting desired changes in programs for the elderly: legislative action, interagency relationships, the citizen role.

GERO. 109 Staff
Aging and Human Behavior 3 credits
A critical examination of life satisfaction in old age; the social and psychological factors which affect it; factors contributing to the psychological well-being of older adults as a function of their position in the social system.

GERO. 110 Dr. Rynn
Aging in Anthropological Perspective 3 credits
A cross-cultural approach looking at the ways in which a variety of societies deal with aging and the aged. The relationship between work, economics, other types of expertise, and different definitions of the aged is analyzed

GERO. 122 Dr. Rielly, Dr Talamini
Social Problems of Aging 3 credits
This course is devoted to a study of the specific problems of the aged in American society, with particular attention on both individual and societal levels to issues of age, inequality in opportunities and rewards; of mental health, housing, minorities, and institutions; of crime and fear of victimization; of economic status, work, leisure, and retirement; of attractiveness, aging and sexuality; of drugs, doctors, nursing homes and hospitals.

GERO. 126 Dr. Rielly
Aging and Death 3 credits
This course offers the student an opportunity to explore the mystery and meaning of death. Focus is on a number of aspects of dying and the death process, such as the dying individual and the family; cross-cultural perspectives; terminal illness; professions and death; rites and rituals.

GERO. 191 Staff
Independent Study in Gerontology 3 credits
Designed for advanced students who are capable of independent study. A program of planned research in gerontology under the guidance of a faculty member. Registration upon approval of Chairman of the department and the instructor directing the study.

GERO. 198/199 Staff
Practicum in Gerontology 3 credits
Supervised experiential learning in one or more organizations that serve older adults. Supervision by a faculty member and agency supervision required. In selected cases a student may receive credit for part-time paid experience. In either case, approval of mentor is necessary. Limited to juniors and seniors.

THEOLOGY AND RELIGIOUS STUDIES

FR. ROUSSEAU, S.J., *Chairperson*

The religious dimension of human life is of such importance that it must be explored in a liberal arts curriculum.

The General Education requirement for all students at the University of whatever religious persuasion is six credit hours in theology or religious studies courses. Additionally, they have the option of completing another six hours in either philosophy or theology/religious studies to complete the GE AREA V requirements. T/RS 186 Jewish Theological Thought and T/RS 185 The Protestant Faith are taught, respectively, by a Jewish rabbi and Protestant Minister.

All freshman students take T/RS 21, a non-denominational introductory course on the role of religious experience in human life. Beyond Freshman year, for the second required course in Theology/Religious Studies, students may select from any upper division course (course numbers in the 100's).

The Bachelor of Arts degree in Theology/Religious Studies requires 30 credits in the major including the introductory course required of all students and a yearly Majors Seminar after Freshman year. To ensure a well rounded background in the discipline, each major must take at least one course in each of the 5 categories listed below. Each major is expected to confer with the departmental chairperson for the selection and balancing of courses. The department also offers a double major program compatible with most other majors. It has similar requirements, including the Majors Seminar each year.

Departmental Courses are grouped into the following categories:

Biblical Theology (100-129)
Doctrinal Studies (130-149)
Historical Studies (150-159)
Moral Theology (160-174)
Religion and Society (175-189)

T/RS 21 Staff
Introduction to Theology/Religious Studies 3 credits
A foundational exploration of the questions, concerns, nature and values of religion through a study of World Religions and/or the Judaeo-Christian tradition.

T/RS 55 Fr. Houston
Ministerial Perspectives I 3 credits
A survey of the development of ministry from a theological perspective. Emphasis is placed on the initiation rite understood as the source of ministry in the Church. Also explored is the sacrament of Holy Orders within the context of the Church primarily experienced as a baptismal community. For Pius X seminarians only.

T/RS 56 Fr Houston
Ministerial Perspectives II 3 credits
A study of the various ministries: liturgical, social, educational, familial and youth-centered, from both a theologico-historical perspective and a pastoral one.

T/RS 100 Dr. Steele
Inside the Old Testament 3 credits
This course is designed to introduce the student to a full range of Old Testament literature wtih attention to its literary form, historical content and levels of meaning. Readings from the primary sources will be supplemented by secondary readings.

T/RS 101 Staff
Inside the New Testament 3 credits
Similar in format to T/RS 100; selected Pauline epistles, the Gospel of Mark and John I will be principal texts.

T/RS 102 Fr. Bergamo
Introduction to Biblical Exegesis I 3 credits
The individuals, history and literature of the Old Testament, with special emphasis on ancient Near East environment, and the relation of this literature to the biblical books.

T/RS 103 Fr. Bergamo
Introduction to Biblical Exegesis II 3 credits
An examination of the discipline of the Old Testament theology. Critical and exegetical study of selected writings in the Bible, Biblical criticism.

T/RS 108 Dr Steele
Jesus for the Gentiles: An Introduction to the Gospel of Luke 3 credits
The primary purpose of this course is a close reading of the Third Gospel Although the primary focus will be on the text rather than on methods of analysis, appropriate attention will be paid to literary forms, historical background and responsible interpretation (Complements T/RS 101 and 112).

THEOLOGY/RELIGIOUS STUDIES MAJOR

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	T/RS 21-Elective	Introduction to Theology/Religious Studies — Elective	3	3
COGNATE	Elective	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA II	Social/Behavior	Elective	3	
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE FREE	Elective	Elective	3	
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	T/RS	Second Year Electives	3	3
COGNATE	Elective	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	T/RS	Electives	6	6
COGNATE	Electives	Electives	3	3
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	6	6
			18	15
		SENIOR		
MAJOR	T/RS	Electives	3	3
COGNATE	Electives	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Philosophy	Philosophy Electives	3	3
GE AREA FREE	Intd. — Elective	Interdisciplinary Elective — Elective	3	3
		TOTAL: 127 credits	15	15

MINOR. The minor in T/RS requires 15 credits beyond the introductory course preferably spread over several areas. By permission of the chairperson, a minoring student may be admitted to the yearly Majors Seminar.

T/RS 110 Rabbi Shoop
Ideas and Ideals of Hebrew Scripture 3 credits
Biblical teaching seen as a revolution against contemporary cultures and moralities. The Bible as process, exhibiting development and change in a world outlook, ethical ideals and ritual. The questions of the "who" and "when" of biblical authorship. The Bible as a cultural force, influencing all languages, poetry, music, painting and sculpture. The "truth" of Biblical selections; scientific, historic, mythical and ethical truth.

T/RS 111 Fr. Barone
Pauline Letters 3 credits
An introduction to the Apostle of the Gentiles, who preached Christ to the great cities of the Greco-Roman world. Archaeological discoveries relevant to Paul's mission journeys are presented through film and slides.

T/RS 112 Fr. Barone
The Gospels and Jesus 3 credits
An historical-critical study of the synoptic gospels. The historical figure of Jesus of Nazareth as perceived in the resurrection faith of the early Christian communities. Film and slide presentations of archaeological discoveries relevant to New Testament era.

T/RS 132 Fr. Walsh
Symbolic Dimensions of Faith 3 credits
This course is designed to explore the universal symbols that have emerged from the collective experience of mankind, and which man has employed in his attempts to communicate with God, particularly in the Judaic-Christian tradition.

T/RS 133 Fr. Coccia
Christian Spirituality 3 credits
An historical, analytical, appreciative study of the fundamental principles and development of Christian ascetical theology. Traditional concepts such as faith, prayer, sin, conversion, discernment, peace, consolation, desolation, repentance and mortification are examined and evaluated.

T/RS 134 Fr. Walsh
Conversion and Reconciliation 3 credits
The biblical theology of God's call to a life of conversion and the celebration of that experience in the Sacrament of Reconciliation. A history of the various stages of the Sacrament of Penance; the renewed understanding of this sacrament as seen in the Revised Ritual of Reconciliation.

T/RS 137 Fr. Gonzalez
Ignatian Spirit 3 credits
This course will study the Society of Jesus (Jesuits). It will include a survey of the 400 year tradition of the order as well as an introduction to their spirituality as reflected in the Spiritual Exercises. Guest lecturers are a regular part of the course.

T/RS 138 Sr. Kopas
Theology of the Person 3 credits
This course studies the religious dimensions of personal existence against the background of Christian tradition and contemporary experience. In the process it develops some of the main themes of a Christian anthropology including creation, salvation and alienation.

T/RS 139 Fr. Bergamo
Theology of the Church 3 credits
An exploration of the concepts of the Christian community from their source in the Bible to the Second Vatican Council. The Church as sacrament and mystery with an emphasis on the period of Vatican II and following.

T/RS 140 Fr. Barron, S.J.
Religion and Worship in Transition 3 credits
A study of the development over the centuries of various modes of worship, sacramental celebration and spirituality including present day movements growing out of Vatican II into the post-conciliar era.

T/RS 141 Dr. Benestad
Spiritual Classics 3 credits
A study of the autobiographies of St. Augustine and St. Teresa of Avila (The *Confessions* and *Life of Teresa of Jesus*). As an introduction to the study of the spiritual life, John Paul II's *Sign of Contradiction* is read.

T/RS 143 Fr. Walsh
Myths, Dreams and Divine Revelation 3 credits
An inquiry into the theology of symbol and its relationship to Christ as the preeminent symbol of God. A survey of the images and myths produced by primitive civilizations is made in order to establish the roots of God revealing himself. These images and these symbols are then related to modern dream interpretations and its relevance to Christ and the theology of symbol.

T/RS 144 Fr. Sable
Introduction to the Theology of the Byzantine Churches 3 credits
The Byzantine theological tradition develops special emphases within the mainstream of the Christian tradition. This course introduces the student to the study of some of the specifically Byzantine contributions to the understanding of the Christian mystery.

T/RS 145 Fr. Sable
Introduction to Eastern Liturgies 3 credits
A survey of the Eastern Eucharistic Liturgies with particular emphasis on the structure, history, and liturgical theology of the Byzantine Liturgy of St John Chrysostom

T/RS 146 Sr. Kopas
Jesus the Christ in Tradition and Culture 3 credits
The purpose of this course is to examine the meaning and message of Jesus Christ as understood and communicated in the faith of his followers. Special consideration will be given to symbolic dimensions and cultural aspects of Christian understanding.

T/RS 147 Fr. Levko
Eastern Christian Spirituality 3 credits
A study of the meaning of the spiritual life for Eastern Christian writers with a particular emphasis

upon Sts. Athanasius, Gregory of Nyssa and Gregory Palamas. Themes such as prayer, image and likeness with God, discernment of spirits, hesychasm and icons will be discussed

T/RS 148 Fr. Gonzalez
Mystics and Masters 3 credits
Comparative study of Buddhist enlightenment and the Christian experience of God, with the help of writings from both religious traditions and some meditation practice. Students will write short papers regularly and there will be an oral final examination.

T/RS 149 Fr. Rousseau
Great Christian Ideas 3 credits
A study of the history and current relevance of such great Christian ideas as God, revelation, man, religion, salavation, the Church, and the spiritual life.

T/RS 150 Fr Linehan
The Power and Secret of the Jesuits 3 credits
A history of the Jesuits and the Post-Reformation Church with an emphasis on Jesuit cultural and theological contributions.

T/RS 151 Fr. Rousseau
The Christian Religious Tradition 3 credits
A study of the vital growth of Christianity's life, doctrine, worship and spirituality over the centuries. Special emphasis will be placed on principal leaders, thinkers and heroes.

T/RS 152 Mr. Yevics
Liturgical Theology of Byzantine Churches 3 credits
Leiturgia as the common action of the people. The various elements of the the liturgical life of the Byzantine churches.

T/RS 153 Drs. Benestad & Nordberg
Great Books: Perspectives on Western Culture 3-6 credits
The religious, philosophical and political writings of major thinkers of the Western tradition. The first semester includes the study of the Bible, Aristotle's *Ethics*, Plato's *Apology*, Augustine's *City of God*, and the thought of Aquinas. Emphasis is on the study of these works as they illuminate the current world. The second semester description is found under Phil. 159.

T/RS 154 Fr. Rousseau
Religion and the People of America 3 credits
An exploration of the great religious developments, persons, and questions in the life of the American people from the beginnings to the present day.

T/RS 155 Dr Benestad
Introduction to the Greek Fathers
Using primary sources this course provides an introduction to major themes of the Greek Fathers. Justin's Apology, Against Heresies by Irenaeus, Christ the Educator by Clement of Alexandria, On the Incarnation by Athanasius, the Lord's Prayer and the Beatitudes by Gregory of Nyssa, Basil's Moralis and Letters and Nazianzen's Theological Discourses.

T/RS 158 Dr. J. McCarthy
Classics of Christianity 3 credits
The purpose of this course is to read, view, or listen to selected scriptural, theological, ritual and contemplative expressions of Christianity. The course will include written, aural and visual texts. Regular readings and discussions will be a part of this course.

T/RS 162 Dr. Benestad
Christian Ethics in the Modern World 3 credits
This course will discuss the practice of the Christian moral life in contemporary society. The Christian virtues will be distinguished and related to selected problems arising in our lives as private individuals, as members of families, as professionals and as citizens. Other topics to be treated include: evil, sin, Christian liberty, Christian perfection, relativism and humanism.

T/RS 163 Prof. Casey
The Church and Contemporary Social Issues 3 credits
Explores the religious and ethical dimensions of social issues such as prejudice and violence. The findings of related social sciences and literature are placed in the context of Christian anthropology to give the student a concrete view of their interrelationship.

T/RS 164 Dr. Benestad
Social Ethics 3 credits
This course will prepare students to recognize

ethical dimensions of political, economic and social issues through the study of the following: pertinent writings of Pope Paul VI and Pope John Paul II, a classic work of political theory, and several contemporary writings on such issues as morality and foreign policy and economic justice.

T/RS 165 Fr. Gannon
Moral Theology 3 credits
This is a study of the Christian moral tradition, its validity as a lien on conscience, its evolution and permanence. Specific areas treated will include obedience to the Church, the family, sexual activity and attitudes, the "rights of truth," human rights.

T/RS 166 Dr. Benestad
John Paul II and Catholic Social Thought 3 credits
This course will explore the dialogue between the Catholic Church and modern ideologies on social and political matters. Readings include pertinent documents of the Second Vatican Council and recent papal writings, especially those of Pope John Paul II.

T/RS 174 Dr. Steele
Suffering 3 credits
The existence of suffering and evil presents a particular problem for those who believe in a God who is unlimited both in power and goodness. This course will examine the problem and possible solutions through analysis of the Book of Job, Walker Percy's *Second Coming*, and New Testament selections.

T/RS 175 Fr. Rousseau
Contemporary Case Studies in Theology 3 credits
By analyzing several concrete, contemporary "cases," this course will attempt to clarify the theological framework and the Christian issues involved in such situations and so to increase one's ability to look at life out of a genuinely Christian context.

T/RS 176 Rabbi Shoop
Theology of the Holocaust 3 credits
A course dealing with historical, religious and psychological elements of the Holocaust. The course will treat the writings of many of the contemporary theological thinkers in their treatment of man's inhumanity to man. The course will treat both Christian and Jewish theological responses to the Holocaust. The problem of evil in the universe will be analyzed in the framework of the Holocaust.

T/RS 178 Prof. Osterle
Theology and the Global Village 3 credits
A theological reflection on world food/hunger issues as related to religious belief and action. The role of the responsible Christian and Jew in an interdependent world is explored; the implications of progress for a simplification of life style in a just world order.

T/RS 179 Prof. Osterle
Peace Theology and the Arms Race 3 credits
Examination of the religious conviction that peace cannot be based on weapons. An investigation of contending perspectives on arms and disarmament; reflection on Christian responses to war/peace and the fundamental relationship of peace education to human development.

T/RS 180 Prof. Casey
Politics: A Christian Perspective 3 credits
An inquiry into the role of the state, the Church and the individual in political life. Special attention is given to the problem of violence; the course is set in the unique American perspective of Church-State relations.

T/RS 185 Rev. Carlson
The Protestant Tradition 3 credits
This course will explore the Reformation vision of theology. It will cover the roots and principles of the Protestant way of dealing with such topics as the nature of the Church, redemption, ethics, God and Jesus.

T/RS 186 Rabbi Shoop
Jewish Theological Thought 3 credits
The nature, creeds, and institution of Judaism. The God Concept, Man and His Will, the Nature of the Good, the Destiny of Man, the Shadow of Sin.

T/RS 187 Dr. Benestad
The Supreme Court and Church-State Issues 3 credits
This course explains the reasons for the separation of Church and State in the United States and then focuses on Supreme Court cases which have arisen under the free speech and religion clauses of the First Amendment.

T/RS 190 Dr. Benestad
Biomedical Ethics 3 credits
This course will present theological reflections on the two main ethical theories undergirding contemporary biomedical ethics. It will also present and discuss relevant philosophical and theological arguments on such issues as abortion, care of handicapped infants, euthanasia, suicide and the profession of medicine.

INTERDISCIPLINARY COURSES

INTD. 17 Drs. Homer, McInerney
Great Lives: Images on Stage and in History 3 credits
An examination of the often contrasting impressions of historical personalities, as they are portrayed in plays and films and as they appear to historians. Historical figures to be considered include Caesar, Richard III, Thomas More, Lincoln and Churchill.

INTD. 20
The Dynamics of World Hunger 3 credits
Taught by a team of faculty from several departments.
This course focuses on the national and international problem of hunger and the question of adequate food resources. The politics, production and economics of food are discussed. Different solutions to the food problems as practiced in different countries are evaluated from the standpoint of ethics and utility.

INTD. 22 Ms. Boga & Mrs. Lawhon
From Fiction to Musical 3 credits
A study of the literary works of Shaw, Goethe, Singer and Thornton Wilder and the translation of their work into music: *My Fair Lady, Faust, Yentl, Hello Dolly.*

INTD. 24 Staff
Parenting 3 credits
Integrating the disciplines of psychology and literature, this course is designed to increase one's capacity to be a good parent. Fiction is used as discussion source for learning about child development, family relations, and parent education.

INTD. 26 Profs. Babcock, Baillie, Benestad
Is Capitalism Christian? 3 credits
A philosophical, theological, and economic inquiry into the nature of Capitalism and the nature of Christianity to determine the compatibility between them.

INTD. 32 Drs. Carey, Vinson
Science and the Human Environment 3 credits
A brief study of the effects of the technological, scientific and industrial progress on the air, land and water resources of the human environment. Problems in each of the resource areas will be discussed in detail.

INTD. 33 Drs. Parsons, Champney
Politics and Literature 3 credits
A consideration of the nature of politics and political argument; a discussion of literature as a forum for political argument. Analysis of Latin American novels for the use of political and literary symbols.

INTD. 34 Drs. Beal & Williams
The Medieval World 3 credits
The Calamitous 14th Century: A look at the Medieval world of Chaucer, Petrarch, Boccaccio, William of Occam and Wyclif. This course will focus on the thought and literature of this time of papal schism, nominalism, chivalry, the black death and the last crusade.

INTD. 37 Dr. A. Hill and Mrs. Lawhon
Women: Cross Cultural Inquiry 3 credits
Drawing on literature from fiction and anthropology, this course explores the dimensions of female roles and identities in various cultural settings. The novels of Pearl Buck, Doris Lessing and Ruth Jhabvala Prawer are discussed in relation to the cultural context of gender studied by Mead, Friedl and other anthropologists.

INTD. 38 Staff
The Vietnam Experience 3 credits
The historical origins of the Vietnam War including the period of French colonialism and the American intervention, the politics, economics, and military strategy in Vietnam during the war years and today. Present relations with China and the USSR. Why were we there and why did we fail?

HUM. 171 Dr. Ann Hill
Chinese Civilization 3 credits
An introduction to Chinese civilization, beginning with a survey of recent archeological materials on the Chinese Neolithic. Enduring Chinese institutions and modes of thought and expressions are viewed in the broad context of traditional China, providing a contrastive framework for a brief consideration of the PRC.

Mrs. Barbara Gleason, Assistant to the Dean, and Professor George Babcock, Acting Dean.

SCHOOL OF MANAGEMENT

SCHOOL OF MANAGEMENT

PROF. GEORGE BABCOCK, *Acting Dean*

GOALS AND OBJECTIVES

The primary goal of the School of Management is to prepare future leaders for business and such other sectors of society as governmental and non-profit institutions requiring managerial talent, leaders who have a broad knowledge of the methods and processes of professional management and an informed understanding of the interrelationships between the professional world and society at large. The manager is not only a decision maker, but is also the leader responsible for the implementation of decisions and the evaluation of results.

Therefore, the undergraduate program of study seeks to accomplish the following objectives:

1. **Liberal Arts:** To provide students with a broad liberal arts foundation, that their knowledge, skills, attitudes and values may have a human and social dimension as well as a professional dimension.
2. **Professional Core:** To provide students with a sound background knowledge of the theory and practice of modern management, to begin the development of skills needed for successful managerial careers, and to develop an openness to the attitudes, values and commitments that society rightly expects of professionals.
3. **Specialized Professional Interest:** To provide students with the opportunities for specialized professional work in specific discipline areas.
4. **Personal Development:** To provide students with opportunities of developing their knowledge, skills and commitment to their professions and to society by involving them in varied non-classroom endeavors such as participation with faculty on community service projects, internships and other professional extra-curricular opportunities.
5. **Community Service:** To encourage faculty and students to serve the community through research and investigation of regional management problems.

PROGRAMS OF STUDY

Four programs are available: Accounting, Economics/Finance, Management and Marketing. In the Management program the student may choose between an organizational behavior option and a production management option. These programs prepare the student for a career in business or for graduate study. Except for the requirements of the major and cognate, the student in the School of Management will adhere to the same regulations as the student in the College of Arts and Sciences. Apart from minor exceptions, which require explicit approval of the Dean of the School, the student will spend the senior year in residence at the University.

PROGRAMS OF STUDY

LOWER DIVISION

The curriculum in the lower division is the same for all programs. Note that in the SOM the COGNATE area is called the BUSINESS CORE.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
BUS CORE	Econ. 11-12	Principles of Economics I-II	3	3
GE AREA I	Math. 3-4 or Opt.	Quant. Methods or Math Option††	3	3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE ARE V	Phil.20-T/RS 21	Introduction to Philosophy — Introduction to Theology	3	3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	16
		SOPHOMORE		
BUS CORE	Acc. 1 (3)-2 (4)**	Elementary Accounting Sequence	3	3
BUS CORE	Mgt. 15-16	Statistics for Business I-II	3	3
BUS CORE	Mgt. 9†	Legal Environment of Business	3 or	3
GE AREA II, IV	Soc. 21*-Comm. 103*	Prin. of Sociology-Logic & Rhetorical Analysis	3	3
GE AREA III	CMPS 21*†	Intro. to Computer Science	3 or	3
GE AREA V	Phil. 110-Elective	Ethics — Elective	3	3
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			16	16

*Recommended

**Accounting and Finance majors take Acc. 1, 2: Financial Accounting, I, II. Other business majors take Acc. 3, 4: Financial Accounting, Managerial Accounting.

†Accounting majors should take Mgt. 9 in the Fall and CMPS 21 in the Spring; other business majors should reverse the order.

††See Math Option for business students, p. 152.

Prof. Ponos Apostolidis conducting a marketing class.

UPPER DIVISION

In the upper division the BUSINESS CORE courses are the same but are not taken at an identical time. The courses in the majors, of course, differ.

ACCOUNTING

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		JUNIOR		
MAJOR	Acc. 21-23	Intermediate Accounting I-II	3	3
MAJOR	Req. Maj. †	Required Courses	3	3
BUS CORE	Mgt. 108-116	Organization and Management — Organizational Behavior	3	3
BUS CORE	Mgt. 109-115	Intro. to Mgt. Science — Product. and Op. Mgt.	3	3
BUS CORE	Fin. 110-Mar. 107	Corporation Finance — Managerial Marketing	3	3
GE AREA I, II	Nat. Sci.*-Psych. 23	Elective-Fund. of Psych.	3	3
			18	18

†Fin. Acctg. Option: Acc. 123-121 Federal Taxes, Auditing; Mgrl. Acctg. Option: Acc. 115-128 Cost Acctg., Fedl. Taxes of Corporations.

		SENIOR		
MAJOR	Req. Maj. †	Required Courses	6	6
BUS CORE	Mgt. 180-Intl. Elec.	Policy/Planning-Intl. Bus. Elective	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS	Elective	3	
GE FREE	Intd.-Phil. 133*	Senior Interdisciplinary Elective — Business Ethics	3	3
			18	18

TOTAL: 136 credits

†Fin. Acctg. Option: Acc. 117-115, Advanced Acctg., Cost Acctg., Maj. El.-Maj. El. Adv. Acctg. Electives; Mgrl. Acctg. Option: Acc. 125-Maj. El., Adv. Mgrl. Acctg., Adv. Acctg. Elective — Maj. El-Maj. El. Adv. Acctg. Electives.

FINANCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		JUNIOR		
MAJOR	Econ. 117-118	Intermediate Economics I-II	3	3
GE AREA I MAJOR	Nat. Sci.-Fin. 171	Elective-Corporation Finance	3	3
GE AREA II MAJOR	Psych. 23-Fin. 175	Fund of Psych-Investment Management	3	3
BUS CORE	Mgt. 108-116	Organization and Management — Organizational Behavior	3	3
BUS CORE	Mgt. 109-115	Intro. to Management Science — Prod. & Op. Mgt.	3	3
BUS CORE	Fin. 110-Mar. 107	Corporation Finance — Managerial Marketing	3	3
			18	18

		SENIOR		
MAJOR	E/F 170-Maj. Elec.	Money & Fin.-Econ. Elective	3	3
MAJOR	Fin. 173-Maj. Elec.	Financial Management-Elective	3	3
BUS CORE	Mgt. 180-Intl. El.	Policy/Planning-Intl. Elective	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133*	Electives	3	3
GE AREA	Intd. El.	Senior Interdisciplinary Elective	3	
			18	18

*Recommended

TOTAL: 136 credits

MANAGEMENT

	Dept. and No.	Descriptive Title of Course	Credits	
		JUNIOR	FALL	SPRING
MAJOR	Req Maj. †	Required Courses		6
BUS CORE	Mgt 108-116	Organiz. & Mgt.-Orga. Behavior	3	3
BUS CORE	Mgt. 109-115	Intro. Mgt. Sci.-Prod. & Op. Mgt.	3	3
BUS CORE	Mar. 107-Fin. 110	Mgrl. Mktg.—Corporation Fin.	3	3
GE AREA I	Nat. Sci. 21*	Elective	3	
GE AREA II	Psych. 23	Fund of Psych.	3	
			15	15

† Organizational Behavior Option: Mgt. 140-Personnel-Mgt., Mgt. 141-Labor Relations.
Production Management Option: Mgt. 150-Adv. Production and Inventory Mgt., Mgt. 151. Mgt. of Materials, Methods and Productivity

		SENIOR		
MAJOR	Maj. Courses †	Required & Elective Courses	6	6
BUS CORE	Intl. El.-Mgt. 180	Intl. Elective-Policy Planning	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133*	Electives	3	3
GE FREE	Sr. Intd. El.	Senior Interdisciplinary El.	3	
			18	18

TOTAL: 130 credits

† Organizational Behavior Option: Mgt. 142-Organiz Th., Mgt. 182-Mgt. Seminar / Management Elective, Management Elective Production Management Option. Mgt. 152-Compter Applic to Manufacturing Mgt., Mgt. Seminar / Mgt. Elective, Mgt. Elect.

MARKETING

	Dept. and No.	Descriptive Title of Course	Credits	
		JUNIOR	FALL	SPRING
GE AREA I MAJOR	Nat. Sci.-Mar. 130	Marketing Research	3	3
GE AREA II MAJOR	Psych. 23-Mar. 132	Fund. of Psych.-Buyer Behavior	3	3
BUS CORE	Mgt 108-116	Organization and Management — Organizational Behavior	3	3
BUS CORE	Mgt. 109-115	Intro. to Management Science — Prod. and Op. Mgt.	3	3
BUS CORE	Mar. 107-Fin. 110	Managerial Marketing — Corporation Finance	3	3
			15	15
		SENIOR		
MAJOR	Mar. 131-Mar. Sem.	Marketing Communications — Mar. Seminar	3	3
MAJOR	Major Electives	Business Electives	3	3
BUS CORE	Intl. El.-Mgt. 180	International Elective — Policy/Planning	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133*	Electives	3	3
GE FREE	Intd. El.	Senior Interdisciplinary Elective	3	
			18	18

*Recommended

TOTAL: 130 credits

MATH OPTIONS FOR BUSINESS STUDENTS

A. This option is to be selected by students deficient in the topic areas covered in Math 3, 4 and /or whose SAT math score is below 500. This sequence is to be taken in the freshman year.

MATH 3
Quantitative Methods I 3 credits
Finite Mathematics covering functions and graphs; matrix methods; linear programming and probability.

MATH. 4
Quantitative Methods II 3 credits
Differential and integral calculus. Calculus with applications to solution of management problems.

B. This option is available to students who have taken calculus in high school and have an SAT math score of 575 or greater. This sequence is to be taken in the freshman year.

MATH. 14
Analysis I 4 credits
The beginning of a twelve credit sequence covering topics of analysis.

MATH. 21
Analysis II 4 credits
(Prerequisite: Math 14, or equivalent.) An integrated course covering the topics of calculus using modern methods.

C. This option is available to students who have taken calculus in high school and have an SAT math score of 500 or greater. Students selecting this option will take CMPS 21, Programming for Business and Social Science, in the Fall semester of freshman year. CMPS 25 will follow in the Spring semester, and CMPS 127 will be taken later in the program.

CMPS. 24
Computer Science I 3 credits
An introduction to programming concepts and methodology using the programming language PASCAL. The course emphasizes a structured programming approach. Topics included are problem analysis, modularization, top-down design, and the elements of the programming language, PASCAL.

CMPS. 127
Information Systems 3 credits
Introduction to concepts and practices of information processing. Computerized system requirements and techniques in providing appropriate decision-making information to management. Pre: CMPS. 20/21.

PERSONAL COGNATE IN COMPUTER SCIENCE FOR BUSINESS MAJORS

Business Students desiring a strong background in computer technology may elect to take a personal cognate in computer science. This cognate will involve credits beyond normal degree requirements. The following selection of courses is recommended:

ACCOUNTING MAJORS
CMPS. 21 Programming for Business and Social Science
CMPS. 24 Computer Science I
CMPS. 127 Information Systems
CMPS. 126 Cobol Programming
CMPS. 136 Advanced Cobol
CMPS. 138 Business Systems Analysis

OTHER MAJORS
CMPS. 21 Programming for Business and Social Science
CMPS. 24 Computer Science I
CMPS. 25 Introduction to Computer Science II
CMPS. 127 Information Systems
CMPS. 110 Data Structures
CMPS. 138 Business Systems Analysis

ACCOUNTING

Professors Baker, Ronald Grambo (Area Coordinator), Hammond, Manno, McHale, McLean, Zandarski.

Major electives for the Financial Accounting Option are Acc. 14, 124, 126, 128 and 198. Major electives for Management Accounting Option are Acc. 117, 121, 122, 127, 198; Eco. 117; Fin. 173, 179; and Mgt. 142.

ACC. 1 Staff
Financial Accounting I 3 credits
(For Acc. & Fin. majors) A survey of accounting principles, concepts and procedures. Includes financial statements, information processing cycle, voucher system, receivables, inventory costing methods, plant and equipment, and intangibles. 3 hours lecture.

ACC. 2 Staff
Financial Accounting II 3 credits
(Continuation of Acc. I for Acc. and Fin. majors) A study of accounting principles relevant to payroll accounting, liabilities, partnerships, corporations and investments. Also, techniques required in compiling and interpreting data to be used in decision making, including funds flow, budgeting and cost analysis. The use of computers in accounting will be introduced. 3 hours lecture.

ACC. 3 Staff
Financial Accounting 3 credits
(For non-accounting majors) A survey of the topics in Acc. 1 and 2. Coverage is directed toward the reporting of financial information to interested parties. 3 hours lecture.

ACC. 4 Staff
Managerial Accounting 3 credits
(For non-accounting majors) (Prerequisite: Acc. 3) Accounting techniques required in compiling and interpreting selected data for decision making. Includes such areas as cash and working capital flows, profit planning, statement analysis, capital investment decisions, planning and controlling operations. 3 hours lecture.

ACC. 14 Prof. McHale, Staff
Law for Accountants 3 credits
(Prerequisite: Mgt. 9) A study of the law of personal property, bailments, commercial paper agency, sales, and real property. 3 hours lecture.

ACC. 21 Prof. Manno/Staff
Intermediate Accounting I 3 credits
(Prerequisite: Junior standing, Acc. 2) A comprehensive study of contemporary accounting theory, concepts and procedures and their application of the asset classifications on the balance sheet. Current pronouncements of the various accounting organizations relevant to assets will be emphasized. 3 hours lecture.

ACC. 23 Prof. Manno/Staff
Intermediate Accounting II 3 credits
(Prerequisite: Acc. 21) Application of contemporary accounting theory to liabilities and stockholder's equity classifications of the balance sheet. Current pronouncements of accounting organizations. 3 hours lecture.

ACC. 115 Prof. R.J. Grambo/Staff
Cost Accounting 3 credits
(Prerequisites: Junior standing, Acc. 2) Theories, techniques and procedures in cost accumulation, reporting and control including such topics as job order costs, process costs, by-products and joint-products costing, and standard cost and variance analysis. 3 hours lecture.

ACC. 117 Staff
Advanced Accounting I 3 credits
(Prerequisite: Acc. 23) The theories and promulgated standards of accounting related to multiple business units: including purchase versus pooling theory, consolidated income, minority interest, the use of equity method for unconsolidated investments, and branch accounting. 3 hours lecture.

ACC. 121 Prof. R.J. Grambo/Staff
Auditing Theory 3 credits
(Prerequisite: Acc. 2) A review of generally accepted accounting principles and applicable auditing principles, standards and procedures. Auditing original records and assets. Automation and the examination of electronically prepared records. Preparation of work papers. 3 hours lecture.

ACC. 122 Prof. R.J. Grambo/Staff
Management Auditing 3 credits
(Prerequisite: Acc. 23) An in-depth examination of the accountant in the manager's position. Administrative effectiveness and efficiency as provided through sound internal controls. Design and implementation of monitoring systems within the

Ronald J. Grambo, Ph.D., C.P.A.
Assistant Professor of
Business Administration

organization to promote better cost/benefit decisions. 3 hours lecture.

ACC. 123 Prof. McLean/Staff
Federal Taxes 3 credits
(Prerequisite: Junior standing, Acc. 2) An introductory course covering pertinent phases of federal income taxation. Emphasis on business transactions, preparation of individual, partnership and corporate returns and finding the answers to federal tax questions. 3 hours lecture.

ACC. 124 Prof. R.J. Grambo/Staff
Advanced Auditing 3 credits
(Prerequisite: Acc. 23) A study of the role computers play in the auditors' environment with an analysis of EDP controls and systems' analysis related to the external audit process. Advanced statistical sampling techniques, flow charting and audit program preparation will be covered. 3 hours lecture.

ACC. 125 Staff
Advanced Managerial Accounting 3 credits
(Prerequisite: Acc. 115) Accounting techniques as control devices in business with emphasis on use of accounting data in business decisions. Topics to include budgeting and profit planning, cost profit volume, profit analysis and direct costing. 3 hours lecture.

ACC. 126 Prof. Zandarski/Staff
Advanced Accounting II 3 credits
(Prerequisite: Acc. 117) A study of advanced accounting concepts including international operations, partnerships, fiduciary and institutional accounting, special sales contracts, installment sales and consignments. 3 hours lecture.

ACC. 127 Staff
Accounting Information Systems 3 credits
(Prerequisite: Acc. 23) The design and application of accounting systems in both the manual and automated environments. Analysis of information's accumulation and use patterns in organizations with a focus on providing useful and timely information. 3 hours lecture.

ACC. 128 Staff
Federal Taxation of Corporations and Partnerships 3 credits
(Prerequisite: Acc. 2) An introduction to the taxation of corporations and partnerships including analyses of the tax consequences of the formation, operation and liquidation of regular corporations, Subchapter 5 corporations and partnerships. 3 hours lecture.

ACC. 183 Staff
Accounting Seminar 3 credits
(Prerequisite: Acc. 23) This senior level seminar will discuss advanced topics in accounting that are of current concern. The content and emphasis will be announced by the professor offering the course. 3 hours lecture.

ACC. 195-196 Staff
Guided Research for Independent Study 3 credits
(Approval of Dean required) Content determined by mentor.

ACC. 198-199 Staff
Accounting Internship 3-6 credits
(Approval of Dean required)

ECONOMICS/FINANCE

Professors Bose, Chien, Corcione, Giunta, Ralph Grambo, Nguyen (Area Coordinator), George Reavy.

ECONOMICS

ECON. 10 Prof Corcione/Staff
Essentials of
Economic Theory 3 credits
(Open to non-business majors only) The stress will be on the economic theory and public policy implications. The topics will include the economic theories and policy options for stabilization of the economy; the price system as it regulates production, distribution and consumption and as it in turn is modified and influenced by private groups and government. 3 hours lecture.

ECON. 11 Staff
Principles of Economics I 3 credits
Determinants of aggregate economic activity. The main areas studied are the monetary and banking system, the composition and fluctuations of national income all as influenced by monetary and fiscal policy. 3 hours lecture.

ECON. 12 Staff
Principles of Economics II 3 credits
This course centers on the salient characteristics of the modern American economy. Operations of the price system as it regulates production, distribution, and consumption, and as it is in turn modified and influenced by private groups and government. International economics. 3 hours lecture.

ECON. 117 Prof. Giunta/Staff
Intermediate Economics I 3 credits
(Prerequisite: Junior standing, Econ. 12) This course centers on the analysis of production and cost theories. The topics studied are pure competition, monopoly, oligopoly, monopolistic competition, factor pricing, resource allocation, and income distribution. 3 hours lecture.

ECON. 118 Prof. Giunta/Staff
Intermediate Economics II 3 credits
(Prerequisite: Junior standing, Econ. 11) Course centers on the study of national income accounting, price level fluctuations, problems of full employment, and impact of monetary and fiscal policy on income level and distribution. 3 hours lecture.

ECON. 159 Prof. Bose/Staff
Public Finance and Taxation 3 credits
(Prerequisite: Econ. 118) Government expenditures, budgets, intergovernmental fiscal relations, public debt, fiscal policy, and the principles of taxation. 3 hours lecture.

Hong Nguyen
Associate Professor of
Business Administration

EC/FIN. 160 Prof. Corcione/Staff
Monetary & Financial Economics 3 credits
(Prerequisite: Econ. 118) This course emphasizes the interrelations between financial markets and the commercial banking system, and aggregate economic activity. The course relies on the tools of modern economics and finance to explain macroeconomic activity, the behavior of individual depository institutions, the money "supply", and other subjects that occupy the subject matter of money and banking. 3 hours lecture.

EC/FIN. 165 Prof. Giunta/Staff
International Economics & Finance 3 credits
(Prerequisite: Econ. 11 and 12 and junior standing) International trade theory and policy implications. The effects of trade on the domestic economy. Multinational enterprises and their role in the world economy. The financial aspects of trade. International capital markets. Exchange risk and speculation, international banking and the Eurodollar market.

EC/FIN. 181 Staff
Seminar on Contemporary Economic Problems 3 credits
(Prerequisite: Econ. 118) The content varies. This course is geared to independent scholarship by the student. 3 hours lecture.

FINANCE

FIN. 110 Staff
Corporation Finance 3 credits
(Prerequisite: Junior standing, Acc. 2 or 4, Mgt. 16) A comprehensive study of the financing decision within a corporation. Analysis of risk and return capital budgeting under condition of uncertainty, and financial structure. 3 hours lecture.

FIN. 171 Prof. R.W. Grambo/Staff
Corporation Finance II 3 credits
(Prerequisite: Fin. 110) In depth treatment of the tools of financial analysis and their application on the corporate environment. Topics selected are those requiring computer based techniques for forecasting planning and decision analysis. Electronic spreadsheet techniques will be used throughout the course. Specific applications will be presented in working capital management, capital budgeting and capital structure.

FIN.173 Prof. R.W. Grambo/Staff
Financial Management 3 credits
(Prerequisite: Fin. 110) Advanced study of the capital budgeting process. Stochastic decision models related to financing. Integration of computer techniques in financial decision making. Cases are used throughout the course. 3 hours lecture.

FIN. 175 Prof. R.W. Grambo/Staff
Investment Management 3 credits
(Prerequisite: Fin. 110) A comprehensive study of securities and markets, technical analysis, fundamental analysis and efficient market theories.

FIN. 177 Prof. G. Reavy/Staff
Portfolio Theory and Speculative Markets 3 credits
(Prerequisite: Fin. 110) This course is a study of the mathematics and management of stock and bond portfolios including Markowicz and various Index Models. The analysis of speculative markets including options, and commodity futures markets.

FIN. 179 Prof. Nguyen/Staff
Modeling and Forecasting for Financial Decisions 3 credits
(Prerequisites: Senior standing, Mgt. 16 and Fin. 110) This course is a study of mathematical and statistical tools and methods, including econometrics, as applied to the modeling and forecasting of financial variables that are relevant in financial decision-making. Applied areas include the Capital Asset Pricing Model, and the modeling of financial assets and income statements.

FIN. 195-196 Staff
Guided Research or Independent Study 3 credits
(Approval of Dean required) Content determined by mentor.

FIN. 198-199 Staff
Finance Internship 3-6 credits
(Approval of Dean required).

BEHAVIORAL MANAGEMENT — MARKETING

Professors Adams, Apostolidis, Biberman, Brown (Area Coordinator), Hewitt, Lefkowitz, McKeage, Megley, Poole, Wasilewski, Wormuth.

QUANTITATIVE MANAGEMENT

Professors Chien, Corcione, Duesing, D. Gougeon, Kakumanu (Area Coordinator), Nathan.

MGT. 9 Prof. Wormuth/Staff
Legal Environment of Business 3 credits
The nature, sources, formation and application of law. The judicial function, the court system, litigation and other methods of resolving disputes, legislation, law from judicial decisions, law by administrative agencies, regulation of business activity, antitrust law, consumer protection, environment and pollution control. 3 hours lecture.

MGT. 15 Prof. D. Gougeon/Staff
Statistics for Business I 3 credits
(Prerequisite: Math 4) An introduction to the elements of probability theory. The major probability distributions are covered with an emphasis on business applications. Basic concepts in decision theory are also introduced. 3 hours lecture.

Charter is confirmed on University Chapter of American Production and Inventory Control Society by Sharon McMullen, national representative.

MGT. 16 Prof. D. Gougeon/Staff
Statistics for Business II 3 credits
(Prerequisite: Mgt. 15) A survey of modern statistical methods covering parameter estimation, hypothesis testing, goodness of fit test, analysis or variance, regression analysis, index numbers and time series analysis. 3 hours lecture.

MGT. 108 Staff
Organization and Management 3 credits
(Prerequisite: Junior standing) The major concepts of managerial action deal with planning, organizing, directing and controlling. Knowledge of these key aspects of the management process will provide the student with a framework for decision making. 3 hours lecture.

MGT. 109 Staff
An Introduction to Management Science 3 credits
(Prerequisite: Junior standing, CMPS 21, Mgt. 16) A survey of the quantitative techniques which are used by modern managers. Topic coverage will focus on model building, linear programming methods and simulation. Emphasis is placed on the use and limits of these quantitative methods. 3 hours lecture.

MGT. 115 Staff
Production and Operations Management 3 credits
(Prerequisite: Mgt. 109, CMPS 21, Junior Standing) An introductory course designed to give the student a functional view of how to manage the activities involved in the process of converting or transforming resources into products or services. Topics covered will include an overview of strategic decisions, forecasting, product design and process planning; facility layout; project management; basic inventory models capacity planning; aggregate planning; scheduling

MGT. 116 Staff
Organizational Behavior 3 credits
(Prerequisite: Mgt. 108) Investigates the field of organizational behavior in order to appreciate how work performance is affected by a variety of factors. Individuals, groups and organizations, as they relate to organizational behavior will be studied.

MGT. 140 Prof. Biberman/Staff
Personnel Management 3 credits
(Prerequisite: Mgt. 108) This course will describe and explain the preparation of job descriptions,

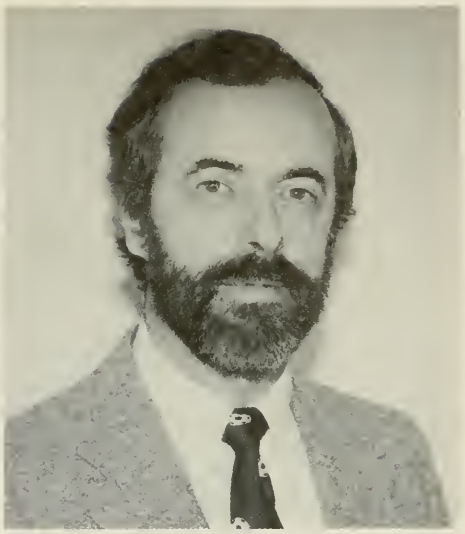
demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage and hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism, and drug addiction; and other functional duties of a personnel department will also be covered. 3 hours lecture.

MGT. 141 Prof. Megley/Staff
Labor Relations 3 credits
(Prerequisites: Mgt. 108, Econ. 12) This course will focus on the factors in our economy contributed by human labor, the benefits which labor obtains from its efforts, the definition of what labor is and how it evolved and matures into a dynamic, vocal constituent of our current industrial society. A major part of the course will deal with labor compensation, wages and benefits, and how they are determined and negotiated. The position of unions in the current labor picture, current attitudes toward minorities in the labor force, discrimination and prejudices, will also be evaluated. 3 hours lecture.

MGT. 142 Staff
Organization Theory 3 credits
(Prerequisite: Mgt. 108, 116) Study of the forces both within and outside the organization that determine the structure and processes of an organization. Topics to be covered will include technology and size influences, conflict, boundary roles, matrix structure, political factors and sociotechnical systems. 3 hours lecture.

MGT. 143 Prof. Biberman/Staff
Group Dynamics 3 credits
(Prerequisite: Mgt. 108 or permission of instructor) Survey and analysis of constructs, research and applications of small group phenomena in an organizational context. Examines the various theories and research measurement and observational methods used in studying groups. Students will be able to explore their own behavior in groups by participating in various groups and/or by observing others in group experiences. The course will prepare students to be effective in groups.

MGT. 145 Prof. E. Hewitt/Staff
Women in Management 3 credits
(Prerequisite: Mgt. 108 or permission of instructor) A seminar exploring the new opportunities for women in management and the special skills and insights needed by them to take full advantage of such opportunities. 3 hours lecture.



Dr. David C. Adams
Associate Professor of
Business Administration

MGT. 148 Prof. Megley/Staff
Organizational Social Responsibility 3 credits
(Prerequisite: Mgt. 108 or permission of the instructor) The course is designed to introduce students to the basic concepts which underlie the social responsibility aspect of the management process. The role of pluralism is examined in the societal system to provide an understanding of the evolving relationship between organizations and society as a whole. The essential nature of the managerial approach is explored in the light of the increasing importance of societal impact on the organization.

MGT. 150 Prof. Nathan/Staff
Advanced Production and Inventory Management 3 credits
(Prerequisite: Mgt. 115) Production Planning and Inventory Management within the organization. Topics covered will include capacity planning; master production scheduling; material requirement planning; reorder point and periodic review models with Probabilistic demand; problems of practical applications.

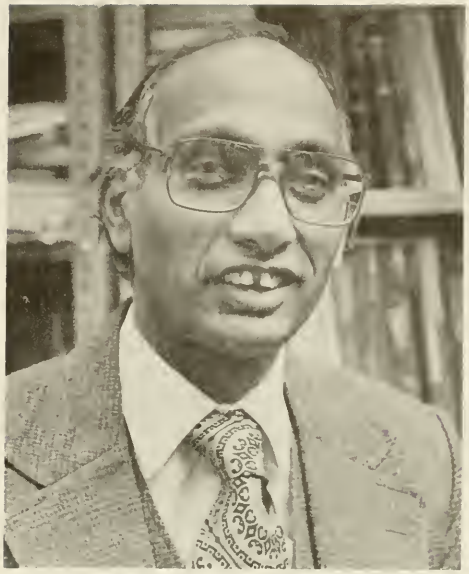
MGT. 151 Prof. Nathan/Staff
Management of Materials, Methods and Productivity 3 credits
(Prerequisites: Mgt. 16, Mgt. 108) A concentrated study of activities associated with materials and their flow within the organization, with emphasis towards productivity improvement. Purchasing, materials handling, facility layout, work measurement, shop flow management; maintenance and quality management.

MGT. 152 Prof. Kakumanu/Staff
Computer Applications to Manufacturing Management 3 credits
(Prerequisite: Mgt. 115) The use of computer software in production and operations. Topics will be selected from: material requirements planning systems; CAD/CAM and computer integrated manufacturing; project planning and scheduling systems; computerized relative allocation of facilities; computerized method for sequence operations for assembly line; any new systems related to production and operations management.

MGT. 153 Prof. Kakumanu/Staff
Business Information Management 3 credits
(Prerequisites: CMPS 21, Mgt. 108) Computers and how they can be applied to the operations and management of business firms. The topics include: data processing concepts; overview of computer hardware and software; modern data and information processing systems; applications of computers in business; acquiring and managing of computer and information resource.

MGT. 168 Prof. Wasilewski/Staff
International Business 3 credits
(Prerequisite: Mgt. 108) Examination is made of the economic, financial, legal, political and cultural setting of international business. Investigates problems, policies and operations of multinational enterprises on such issues as strategic planning, organizational structure, and political risk management. The purpose of the course is to introduce the student to the key concepts and tools that are important to understanding the nature and management of multinational enterprises. 3 hours lecture.

MGT. 180 Profs. Adams, Brown/Staff
Policy and Planning 3 credits
(Prerequisites: Seniors only; Fin. 110, Mgt. 115, 116, Mar. 107) This is the capstone course for all business majors. Concepts and skills developed in the prerequisite courses are integrated and applied to the overall management of an organization. Topics will include setting objectives, designing strategic plans, allocating resources, organizational structuring, and controlling performance. 3 hours lecture.



Prasadarao Kakumanu
Professor of Business Administration

MGT. 182 Staff
Management Seminar 3 credits
(Prerequisite: Mgt. 108) This senior level course will discuss topics of current concern in the management field, and will be conducted in seminar fashion. Content and emphasis will vary from year to year, but will always be up-to-date. Recent appropriate subjects have been: executive development, evolutionary operation, entrepreneurship, etc. 3 hours lecture.

MGT. 195-96 Staff
Guided Research or Independent Study 3 credits
Approval of Dean required. Content determined by mentor

MGT. 198-99 Staff
Management Internship 3-6 credits
Approval of Dean required.

MARKETING

MAR. 107 Prof. Apostolidis/Staff
Managerial Marketing 3 credits
(Prerequisite: Junior standing, Econ. 11, 12) Managerial analysis of the marketing activities in business firms and institutions including issues of macroenvironment, consumer behavior and international markets. Emphasis on segmenting target markets and developing marketing policies, such as product introduction, promotional campaigns, channels of distribution and pricing tactics. 3 hours lecture.

MAR. 130 Staff
Marketing Research 3 credits
(Prerequisite: Mar. 107) Study of the role of marketing information as the basis for decision making. Topics include research design, methods of gathering data, questionnaire structure, interviewing methods, and preparing the final report. Examples of various types of research problems and quantitative techniques used by marketing management are presented. 3 hours lecture.

MAR. 131 Staff
Marketing Communications 3 credits
(Prerequisite: Mar. 107) Personal and mass communication approaches generated by manufacturers and intermediates or institutions toward target markets. The design of advertising campaigns to shift consumer attitudes, to secure resellers support and to inform, persuade and remind action. Development of copy, selection of media and measurement of promotion effectiveness including evaluation of sales force. 3 hours lecture.

MAR. 132 Staff
Buyer Behavior 3 credits
(Prerequisite: Mar. 107) Study of theories of consumer behavior. The buyer is analyzed at the individual level in terms of motivation, attitudes, etc.; at the social level in terms of influences on buying behavior from the socio-economic environment.

MAR. 134 Prof. Lefkowitz/Staff
Sales Force Management 3 credits
(Prerequisite: Mgt. 116, Mar. 107) This course is intended to develop the concepts and techniques needed to identify and analyze the various decision areas faced by a sales force manager. Topics to be covered include recruiting, selecting and training the sales force, forecasting, budgeting, and sales quotas; assigning, motivating and compensating the sales force. 3 hours lecture.

MAR. 135 Staff
Retailing Management 3 credits
(Prerequisite: Mar. 107, Fin. 110, Mgt. 108, 109) This course is intended to focus on the decision areas facing retail managers. Topics to be covered will include retailing structure, merchandising, locations, store layout, promotion, pricing, and personnel. 3 hours lecture.

MAR. 167 Prof. Apostolidis/Staff
International Marketing 3 credits
(Prerequisite: Mar. 107) A managerial approach to international marketing with emphasis on the key variables controllable and uncontrollable by the international marketing executive. A study of the underlying factors which affect the international markets. Special emphasis will be given to multinational marketing programs. 3 hours lecture.

MAR. 185 Staff
Marketing Seminar 3 credits
(Prerequisite: Mar. 107 and instructor's approval) A capstone course to broaden the marketing theoretical and practical ability of interested students and executives. Interchangeable topics every other semester include: marketing for non-profit organizations, retailing channels of distribution, industrial marketing, societal aspects of marketing, sales management and other marketing issues.

MAR. 195-96 Staff
Guided Research or Independent Study 3 credits
(Approval of Dean required) Content determined by mentor.

MAR. 198-99 Staff
Marketing Internship 3-6 credits
(Approval of Dean required)

Catherine T. McNamee, C.S.J., Ph.D., Dean of the College.

dexter hanley college

DEXTER HANLEY COLLEGE

The Evening College of the University of Scranton has been an important part of the University for over half a century. It was the first of the University's colleges to admit women.

In 1976, the Evening College was renamed Dexter Hanley College to honor the Jesuit labor lawyer and former president (1970-1975) of the University. At the same time, the College's commitment to the local community was broadened to include five principal groups:

1. Working adults who wish to pursue a bachelor's degree in evening hours.

2. People of any age who for financial, family, or professional reasons prefer to pursue a bachelor's degree on a part-time basis. (To serve this group, some late afternoon classes were added to the Hanley College schedule.)

3. Students of any age who want to continue their education and obtain an associate degree.

4. Those who want to improve their professional competence and/or to prepare themselves for new careers.

5. Those who want to take advantage of educational programs for their own enrichment.

DEGREE PROGRAMS

BACHELOR'S DEGREE		ASSOCIATE DEGREE
Accounting	Liberal Studies	Associate In Arts
Communications/English	Management	Computer Science
Computer Science	Marketing	Criminal Justice
Criminal Justice	Political Science	Health/Human Services
Economics/Finance	Psychology	Political Science
History	Sociology	Public Administration
Health/Human Services		Social Relations/Gerontology

ADMISSION INFORMATION

Application for Admission

Admission to Dexter Hanley College at the University of Scranton is based on the applicant's academic record, on evidence of ability to do college work and benefit from it, and on indications of personal choice and desire to attend Hanley College. Application forms may be obtained from the DHC Office or may be requested by phone (961-7580).

Admission of First-Time Students

Dexter Hanley College operates on a rolling admissions plan which means that applications are processed on a continual basis as they are received. All candidates are informed of the admission committee's decision within two to three weeks after the completion of their file of supporting credentials.

To complete the application file, the candidate must have the following sent to the Hanley College Office:

1. A completed application form accompanied by the $10.00 application fee.

2. An official high school transcript or Graduate Equivalency Diploma (GED) including scores.

All prospective students are strongly encouraged to seek educational counseling prior to the time of actual registration. Appointments for counseling may be made by contacting the Hanley College Office (961-7580). In some instances students may be referred to the Counseling Center for further testing and academic advising.

Admission of Transfer Students

Under the rolling admissions plan, transfer candidates may be considered on the basis of their last semester's courses and previous work at an accredited college or university. All candidates are informed of the admission committee's decision within two to three weeks after completion of their file of supporting credentials.

To complete the application file, a transfer candidate must have the following sent to the Hanley College Office:

1. A completed application form accompanied by the $10.00 application fee.
2. Official high school transcripts.
3. Official transcripts, mailed directly from every college or university attended.

In general, advanced standing will be granted for those subjects for which there are equivalent courses at the University, for which the student received grades of C or higher, and for those which are acceptable for the specific program the student chooses on entering Hanley College. If the student changes major at a later date, another review of transfer credits will be made at that time, and the student will be given a written evaluation clearly indicating the transfer credits which are applicable to the new major. In all cases, a minimum of 52 credits must be earned at the University of Scranton for a baccalaureate degree from the University.

In the case of students transferring from the College of Arts and Sciences or from the School of Management at the University of Scranton, all coursework satisfactorily completed and applicable to the student's program of studies will be accepted in Dexter Hanley College.

A student who has been dismissed from any other college will not be allowed to register for courses in the semester immediately following the dismissal. The application of such a student will, however, be reviewed at the close of that period and admission *may* be granted at that time.

Admission of Special Students

Special students are those who have already completed a B.A. or B.S. degree at the University of Scranton or another institution, some part-time students taking courses for "self-improvement," and men and women admitted to Certificate Programs.

Students who already have a baccalaureate degree from an accredited institution are eligible to complete a second major or an academic certificate in Hanley College. A student's file is complete when the Hanley College Office has received a completed application and official transcripts from all colleges previously attended.

Students wishing to complete a certificate program in Hanley College must meet the requirements specified by the appropriate department. (Details about the Certificate Programs currently available will be found on pages 179-183.)

Part-time students who do not plan to work toward a degree, a certificate, or a second major must also file the application for admission and must arrange for official transcripts to be sent to the Hanley College Office.

Admission as a special student does not imply admission to candidacy for degree.

Conditional Admission

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Hanley College Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College. A student may, however, be admitted conditionally if the official transcripts have not been received in the DHC Office before classes begin.

The student whose official records are not received within three weeks AFTER classes have begun will be required to withdraw from the College, and forfeit a percentage of the tuition paid, according to the refund policy as set forth for all students by the Treasurer's Office.

Upon receipt and evaluation of the official academic transcripts, the Hanley College Office will notify the student regarding acceptance or rejection. The student who is rejected will be allowed to finish the semester if he/she wishes to do so but will not be allowed to register for subsequent terms. The student who is accepted will be subject to all rules, regulations, and policies of regularly enrolled students. Because official academic transcripts are necessary for effective academic advising, the student who enters under the conditional admission policy takes full responsibility for any errors in course selection and for all extra costs involved in making changes in class registrations.

AUDITORS

Hanley students may register as auditors with the approval of the dean. Although regular attendance is expected of auditors, they are not liable for assigned work, quizzes, or examinations, and they receive no credit for the course. Students not enrolled as auditors who wish to change their status to that of auditor must do so at least one week before the end of the quarter in the Fall or Spring Semesters, and at least three class meetings before the half-way point in the Intersession and either Summer Session. There is no reduction in tuition and fees for auditing a course.

HANLEY COLLEGE BACCALAUREATE DEGREE PROGRAMS

Dexter Hanley College offers a number of baccalaureate degree programs in common with either the College of Arts and Sciences or the School of Management.

The Hanley College baccalaureate programs have the same general education requirements (usually 63 credits) as the corresponding programs in the College of Arts and Sciences and the School of Management. The distribution table for these general education requirements is shown on p. 39.

It should be noted, however, that the physical education requirement, described on p. 37, is waived for DHC students.

The major programs in computer science, criminal justice, history, health/human services, political science, psychology, and sociology are identical with the College of Arts and Sciences, and the requirements are outlined in detail on pp. 57-154 of this Bulletin.

The major programs in accounting, economics/finance, management and marketing are shown in detail under the School of Management listings on pp. 155-168.

Hanley College also offers two majors unique to itself: the Communications/English and Liberal Studies majors. These programs are described below.

Communications/English

The major program in Communications/English aims to help the student to acquire the analytic and critical facilities that close study of literature can develop, as well as an understanding of the processes and institutions whereby communication takes place in our society. The graduate of this program should be prepared to take advantage of a variety of career opportunities: journalism, public relations, government service, managerial training, broadcasting.

To complete the program, a student takes 36 credit hours of course work in English and Communication, 18 credits in cognate fields, and 69 credits in the general education and elective areas. This degree program is open only to Hanley College students, although students registered in the College of Arts and Sciences or the School of Management are welcome to enroll in individual courses offered in the Communications/English program.

Liberal Studies

The Liberal Studies major is a highly individualized program offered exclusively through Dexter Hanley College. Applicants who have attended other accredited colleges may transfer up to 70 credits for applicable courses in which a grade of "C" or better was earned. Students who qualify for this interdisciplinary degree program are eligible to earn as many as 30 semester hours by passing the CLEP (College Level Examination Program) tests with acceptable scores and/or to apply for Assessment of Prior Learning acquired through professional experience or formal course work in noncollegiate settings. Degree requirements for the Liberal Studies major are outlined in the chart which follows:

DEGREE REQUIREMENTS FOR LIBERAL STUDIES

General Education		**Credits**
Area I	**Natural Sciences/Mathematics** (Biology, Chemistry, Physics, Math)	9
Area II	**Social/Behavioral Sciences** (Economics, Political Science, Psychology, Sociology, Education)	12
Area III	**Communications** (Communications, Computer Science, English 7, Foreign Lang., App. Fine Arts)	9
Area IV	**Humanities** (English & Foreign Literature, Fine Arts, History, Philosophy, Theology)	18
Area V	**Philosophy/Theology** (Phil. 20 & 110 — T/RS 21 & elective, 2 other Phil. or T/RS electives)	18
Concentrations*:	(A) ..... (B) ..... (C) ..... (D)	57
	Total Credits Required	123

*N.B.: In developing the concentration areas, the student will select 3 or 4 fields of study, with at least 12 credits and no more than 21 credits in any single field. Careful attention must be given to selecting the areas of study as well as to determining the number of credits to be taken in each area selected. Thus, the student may be asked to seek advice from faculty members in several Departments before drawing up a final degree plan.

ASSOCIATE DEGREES

ASSOCIATE IN ARTS

Background

The Associate in Arts may be considered the natural companion to the Bachelor of Arts degree, serving many of the same kinds of students served by the latter. The Associate in Arts is often classified as the Liberal Arts "transfer degree" in that it provides the student with the broad exposure to the arts and sciences necessary for later specialization in four-year degree programs in Liberal Arts and in business and professional fields. Some students may wish to use the A.A. degree as the foundation of one of the two University of Scranton baccalaureates (the Bachelor of Arts or the Bachelor of Science); whereas others will find that their educational and career goals are best served by using the degree as the basis for entry into programs offered by other institutions.

Degree Requirements for Associate in Arts

The Associate in Arts is the equivalent of a two-year Liberal Arts degree. Each candidate for the degree must complete sixty semester hours of credit. Of these, fifty-four credits must be earned in the Liberal Arts, according to a prescribed plan covering the humanities, social/behavioral sciences, and natural sciences/mathematics. The remaining six semester hours are allotted to free electives in either liberal or non-liberal arts subjects. An outline of the degree credit requirements follows:

CREDITS REQUIRED BY AREA OF STUDY

Area I:	Natural Sciences/Mathematics	9
Area II:	Social/Behavioral Sciences	9
Area III:	Communications	
	Comm. 2 — Oral Communication	3
	English 7 — Written Communication	3
	Elective in Speech, Writing, Foreign Language, Computer Science, App. Fine Arts	3
Area IV:	Humanities	18
Area V:	Philosophy and Theology	
	Phil 20 — Introduction to Philosophy	3
	T/RS 21 — Introduction to Theology/Religious Studies	3
	Phil 110 (Ethics) or Theology Elective	3
		54
Free Electives		6
	TOTAL	60

A comparison of the A.A. degree with the Bachelor of Arts degree reveals that the Liberal Arts distribution requirements are essentially similar. By careful planning, the student can utilize part of the distribution plus the free electives to lay the foundation for a major in a specific discipline in the humanities, social/behavioral sciences or natural sciences/mathematics. Finally, the A.A. will serve to satisfy many of the Liberal Arts distribution requirements and free electives for one of the degrees in business, accounting, management, or marketing.

ASSOCIATE DEGREES IN CAREER-RELATED FIELDS

Background

The Associate of Science degree in career-related fields has been designed as the natural companion to the Bachelor of Science degrees in those majors. At the present time the University offers associate degrees in the following areas:

Computer Science	Political Science
Criminal Justice	Public Administration
Health and Human Services	Social Relations/Gerontology

Degree Requirements

To earn the Associate of Science degree in one of these career-related fields, the student must successfully complete sixty semester hours of credit. Of these, forty-two credits must be earned in the Liberal Arts, according to a prescribed plan covering the humanities, social/behavioral sciences, and natural sciences/mathematics. Twelve additional credits must be earned in the major field. The remaining six semester hours are allotted to free electives in either the area of specialization or any other field. An outline of the degree credit requirement is provided below.

CREDITS REQUIRED BY AREA OF STUDY:

Area I:	Natural Sciences/Mathematics	6
Area II:	Social/Behavioral Sciences	9
Area III:	Communications	
	Comm. 2 — Oral Communications	3
	Engl. 7 — Written Communications	3
	Elective in Speech, Writing, Foreign Lang., Computer Science, App. Fine Arts	3
Area IV:	Humanities	9
Area V:	Philosophy and Theology	
	Phil. 20 — Introduction to Philosophy	3
	T/RS 21 — Introduction to Theology/Religious Studies	3
	Phil. 110 (Ethics) or Theology Elective	3
MAJOR		12
Free Electives		6
	TOTAL	60

SEQUENCE OF STUDY/PREREQUISITES

Students enrolled in degree programs in Hanley College are strongly advised to follow as closely as possible the sequence of studies listed for their chosen major. That students may be assured of having the adequate background for the successful completion of certain courses, prerequisite courses are sometimes listed. The course descriptions in the earlier pages of this Bulletin contain the necessary information on prerequisites. In some cases practical experience may compensate for the lack of prerequisite courses, but such requests for exceptions must be approved by the departmental advisor at the time of registration. Students should also check with their departments for specific scheduling information on course sequences in their major. Since not all required courses are offered each semester, careful planning should be done in advance to assure smooth progress through the degree program.

CREDIT FOR ACADEMICALLY RELEVANT LEARNING

Hanley College provides two types of opportunities for students to earn credit for university-level learning that takes place outside the classroom setting:

College-Level Examination Program (CLEP)

The College-Level Examination Program has been established to enable students of all ages to earn college credit by examination. Through the CLEP tests, applicants may gain credit in many academic subjects applicable to their degree programs. Individuals who wish further information about these examinations should consult the Dean of Hanley College or write directly to the Program Director, College-Level Examination Program, College Entrance Examination Board, Box 1824, Princeton, N.J. 08540.

Assessment of Prior Learning

Many students have acquired substantial amounts of "experiential learning" outside a formal college or university classroom in jobs, military service, or nonaccredited institutions. One who wishes to have this learning assessed for possible credit develops a portfolio describing the relevant experiences and the knowledge gained from them and is then assessed by faculty evaluators from the appropriate department(s). After this evaluation the faculty members recommend a credit award for the student's learning. For further information about this program, contact the Dean of Dexter Hanley College (961-7580).

ACADEMIC REGULATIONS

Hanley College students should consult pages 44 to 47 of this Bulletin for academic regulations common to all three undergraduate colleges of the University. They should also be aware of the following policies which relate specifically to those enrolled in DHC:

Cross-Registration

A student registered in Dexter Hanley College may take courses in the College of Arts and Sciences and/or the School of Management on a space available basis, provided he/she meets the conditions for cross-registration as set forth by the Deans and announced prior to each registration period.

Dean's List

Since many students in Hanley College are enrolled on a part-time basis, the Dean's List criteria for this school differ somewhat from those described on page 45. Students in DHC may earn Dean's List distinction provided they carry at least three courses (9 credits) during the semester and earn at least a grade of "B" in each course. The Dean's List is published at the end of the fall and spring terms each year.

CAMPUS LIFE

Hanley students should consult the Student Handbook for information about such practical matters as I.D. cards, parking permits, and opportunities for commuter participation in various aspects of University life. DHC participation in campus government is provided through the Hanley College Student Council and through Hanley College representation on the University Senate.

TUITION AND FEES 1985-86

Hanley College Tuition	$142.	per credit
University Fee for Hanley Students	20.	per semester
Application Fee for Hanley Students	10.	
Orientation Fee for Hanley Students	20.	

Other course and service fees common to all undergraduates are found in the next section of this Bulletin.

PARENTS' PROGRAM

Whenever at least one dependent child from a family is in attendance at the University as a full-time undergraduate student, a special family tuition reduction policy will apply for a parent enrolled in Dexter Hanley College. The amount of Tuition Credit that will be awarded each semester will be calculated after other financial aid has been applied by the Treasurer's Office personnel. Forms and additional information may be obtained from the Treasurer's Office or from the Dean of Hanley College.

TUITION POLICY FOR SENIOR CITIZENS

Senior citizens 60 years of age or over will be allowed to register for courses at the University of Scranton on a "space available" basis with no tuition charges. A registration fee for credit courses, lab fees and materials fees where applicable, and textbook costs will be charged.

The policy applies to courses in all colleges of the University. If a course is taken for credit, the senior citizen must meet all qualifications and prerequisites for the course.

Senior citizens will register with the Hanley College Office, and papers will be forwarded to the other appropriate offices for processing. This will assure a minimum of waiting in line, etc.

Space availability will be determined as soon as possible in order that the senior citizen will know of his or her acceptance in a class in time to make necessary arrangements for attendance. A minimum of 10 "regular" students must be enrolled for a course before a senior citizen will be allowed to register with no tuition charges. (Otherwise the course is subject to cancellation.)

FINANCIAL AID FOR HANLEY STUDENTS

At the present time several forms of financial aid are available for students enrolled in Dexter Hanley College:

Pennsylvania Higher Education Assistance Agency
Hanley College students are eligible for PHEAA grants if they are taking twelve credits a semester; they are eligible for PHEAA loans if they are taking at least six credits. Students applying for this aid are required to file a formal University of Scranton Financial Aid Application, which includes all the necessary financial and tax information and documentation demanded by both federal and state programs.

Pell Grants
Hanley students taking at least six credits a semester are eligible to apply for federal grants administered under the PELL GRANT program. For these grants, too, the University of Scranton Financial Aid Application and the accompanying documentation are required.

Dexter Hanley Scholarship
Partial tuition scholarships are available for Hanley students who demonstrate a high degree of need as well as academic competence.

Robert L. McDevitt Scholarship

Income from a fund established in 1977 provides scholarship assistance to Hanley College students. The scholarship was established by Robert L. McDevitt, a Georgetown University classmate and longtime friend of Father Dexter Hanley, S.J., who served as President of the University from 1970 to 1975.

Newcombe Scholarship for Mature Women

The Charlotte W. Newcombe Foundation provides scholarship funds for mature women students completing their education in preparation for a second career. These scholarships are available to any such "mature women" enrolled in any of the undergraduate schools of the University of Scranton, but obviously several each year are awarded to women enrolled in Dexter Hanley College.

CONTINUING EDUCATION

Through its Program of Lifelong Learning (PLLUS) the Hanley College Office of Continuing Education offers many educational opportunities for students of all ages.

Non-Credit Courses designed to meet the needs of the mature student. These include refresher programs for those planning to begin studies for an associate or baccalaureate degree, courses for the professional who wishes to upgrade skills or qualify for a license, and courses of general interest for those seeking cultural enrichment or personal development.

Telecourses to meet the needs of those students who have difficulty attending classes on campus. Courses are shown one hour per week on WVIA. Students complete weekly assignments and either mail them in or drop them off at the Hanley College Office. Meetings with instructors are held four times per semester. These courses are geared to highly motivated students capable of doing independent work. (Courses offered vary each semester.)

Conferences, Institutes, and Workshops, which are public service programs arranged for special groups or professionals in a specific area. Such programs occur both on and off campus; many are co-sponsored by other organizations. The Continuing Education Office is the unit on campus designated to award Continuing Education Units (CEU's), a nationally recognized means of documenting certain kinds of adult educational experiences.

Certificates for Academic Credit, which fulfill the need for concentrated education in a specific professional area and provide academic credentials for those who complete the requirements. The Certificate Programs currently offered by the University of Scranton are described below.

For further information regarding any of the Continuing Education programs at the University, contact the Director by calling 961-7582.

CERTIFICATES FOR ACADEMIC CREDIT

A Certificate Program is an educational opportunity to gain professional knowledge or training in a specific field before or after pursuing a degree.

The courses a certificate student takes are part of the regular curriculum of the University. Most certificates are comprised of six to ten academic credit courses which are recorded permanently on a transcript in the Registrar's Office. Some certificates also include guided learning experiences.

Students enroll in the undergraduate certificate programs with a variety of educational backgrounds ranging from no college work to having earned a degree already. A student enrolled in a degree program in Dexter Hanley College may apply for and earn a certificate concurrently.

In order to earn a certificate, a student must maintain at least a C average in the certificate courses and must successfully complete any other requirements as stipulated for a specific certificate program.

Application to a certificate program is made through the Office of Continuing Education in Dexter Hanley College. Each program will be coordinated by a faculty member in the appropriate department. After a student's application is approved by the certificate coordinator, the student is notified of his/her acceptance into the program and may then register. The certificate coordinator serves as a student's advisor in achieving the certificate. A student is responsible for conferring with his/her advisor as needed before registering and in the course of earning the certificate. Information on specific application requirements can be obtained from the Office of Continuing Education.

Certificates currently available include: Computer Science, Information Science, Journalism, Specialized Writing, Drama/Theater, Health and Human Services, Health and Human Services Administration; and several in the field of Business/Management: Pre-Business, Pre-Accounting, Accounting, Finance, Personnel, and Production Management.

CERTIFICATE IN COMPUTER SCIENCE
(18 credits)

A program for adults who seek to develop a familiarity with computers and their application to the industrial environment.

1. Individuals presently in industry who need to develop a greater awareness of computer applications.
2. Individuals who are seeking to develop entry-level skills necessary for industrial computing.

COURSES:

Required:

CMPS. 24	Computer Science I
CMPS. 25	Computer Science II
CMPS. 110	Data Structures

Electives (Select 3 courses):

CMPS. 100	Assembly Language Programming
CMPS. 101	Operating Systems
CMPS. 125	Artificial Intelligence
CMPS. 150	Programming Languages
CMPS. 160	Formal Language Theory

CERTIFICATE IN INFORMATION SCIENCE
(18 credits)

A program for adults who seek to develop a familiarity with computers and their application to the business environment.

1. Individuals presently in business who need to develop a greater familiarity with computer applications.
2. Individuals who are seeking to develop the entry-level skills necessary for business computing.

COURSES:

Required:

CMPS. 24	Computer Science I
CMPS. 25	Computer Science II
CMPS. 110	Data Structures

Electives (Select 3 courses):

CMPS. 126	File Processing with COBOL
CMPS. 127	Information Systems
CMPS. 136	Advanced COBOL
CMPS. 138	Business Systems Analysis

CERTIFICATE IN JOURNALISM
(18 credits)

A program for adults who seek to develop their journalistic skills.

1. Individuals seeking entry level skills in journalism.
2. Individuals seeking to refine existing journalistic skills.

COURSES:

Required:

Engl. 7	Written Communication
Comm. 151	Introduction to Journalism

Electives: (select 4 courses)

Comm. 152	Advanced Print Journalism
Comm. 159	Feature Writing
Comm. 161	Advertising
Comm. 171	Public Relations
Engl. 117	Film Criticism

With the approval of the Certificate Coordinator and the Department Chairman the required courses may be transferred from an approved college or university, or may be waived on the basis of prior experience.

CERTIFICATE IN SPECIALIZED WRITING
(18 credits)

A program for adults who wish to develop their writing skills in specific areas.

1. Individuals who wish to develop skills in specific areas of writing.
2. Individuals who are seeking to refine existing writing skills.

COURSES:

Required:

Engl. 7	Written Communication
Comm. 111	Advanced Composition

Electives (select 4 courses)

Engl. 9	Scientific Writing
Engl. 12	Writing for the Law
Engl. 117	Film Criticism
Engl. 121	Script Writing
Engl. 124	Creative Writing: Poetry
Engl. 126	Creative Writing: Fiction
Engl. 175	Introduction to Publishing
Engl. 176	Magazine Editing
Engl. 177	Children's Literature
Comm. 105	Introduction to Linguistics
Comm. 144	Writing for Television

CERTIFICATE IN DRAMA/THEATER
(21 credits)

A program for adults who wish to develop their knowledge of and skills in the areas of drama and theater.

1. Individuals who wish to develop acting skills for personal satisfaction.
2. Individuals who wish to develop more professional or semi-professional skills in drama and/or theater.

COURSES:

Required:

Engl. 27	Introduction to Drama
Engl. 107	Introduction to Theater
Engl. 108	Introduction to Acting

Electives (select 4 courses):

Engl. 109	Intermediate Acting
Engl. 110	Advanced Acting
Engl. 118	Drama Practicum
Engl. 122	Play Writing
Engl. 149	Dramatic Comedy
Engl. 150	Modern Drama
Engl. 151-152	History of the Theatre
Engl. 168	American Drama: 1919-1939
Engl. 184	Pulitzer Prize Plays

CERTIFICATE IN HEALTH AND HUMAN SERVICES
(18 credits)

A program for adults who seek to develop a familiarity with the health and human services environment.

1. Individuals considering entering the health/human services field.
2. Entry-level employees who are seeking career advancement.

COURSES:

H/HS 11	Foundations of Human Services
Soc. 21	Principles of Sociology
H/HS 12	Health and Human Services Interventions
Psych. 23	Fundamentals of Psychology
H/HS 115-116	Health and Medical Information I & II

CERTIFICATE IN HEALTH AND HUMAN SERVICES ADMINISTRATION
(18 credits)

A program for adults who wish to develop administrative skills in the health and human services profession.

1. Individuals considering entering the field of H/HS.
2. Individuals presently in the health/human services profession.
   A. Those seeking to upgrade present skills.
   B. Those seeking career advancement.

COURSES:

H/HS 11	Foundations of Human Services
H/HS 12	Health and Human Services Interventions
H/HS 115-116	Health and Medical Information I & II
H/HS 121	Organization and Administration of Hospitals
H/HS 122	Organization and Delivery of Health Care Services

CERTIFICATE PROGRAMS IN BUSINESS/MANAGEMENT

LEVEL I

Level I certificate programs will comprise 18 credits, with no more than 6 credits allowed by way of transfer from another approved college. Level I programs are open to any qualified student (i.e., who meets DHC entrance requirements).

LEVEL II

Level II certificate programs will comprise 12 or 18 credits, with no more than 3 credits allowed by way of transfer from another approved college. Level II programs are open only to students who have achieved junior status, and have completed the appropriate level I program.

LEVEL I

Pre-Accounting (18 credits)

Acc. 1, 2	Financial Accounting I and II
Acc. 14	Law for Accountants
Mgt. 9	Legal Environment of Business
Cmps. 21	Programming for Business and Social Science
Eco. 10	Essentials of Economic Theory

Pre-Business (18 credits)

Acc. 3, 4	Financial Accounting — Managerial Accounting
Mgt. 9	Legal Environment of Business
Eco. 10	Essentials of Economic Theory
Mgt. 15, 16	Statistics for Business I and II

LEVEL II

Accounting (18 credits)

Acc. 21, 23	Intermediate Accounting I and II
Acc. 115	Cost Accounting
Acc. 121, 123	Auditing Theory — Federal Taxes
Acc. Elective	

Finance (18 credits)

Eco. 117, 118	Intermediate Economics I and II
Fin. 110, 171	Corporation Finance I and II
Fin. 173	Financial Management
Fin. Elective	

Production Mgt. (12 credits)

Mgt. 109, 115	Introduction to Management Science — Production & Operations Management
Mgt. 151	Management of Materials, Methods and Productivity
Prod. Elective	

Personnel (12 credits)

Mgt. 108	Organization and Management
Mgt. 140, 141	Personnel Management — Labor Relations
Pers. Elective	

SAINT PIUS X SEMINARY

In cooperation with the Diocese of Scranton and its Bishop, J. Clifford Timlin, D.D., the University offers a variety of academic degree programs to students training for the diocesan priesthood in the formation program at St. Pius X Seminary, Dalton, Pa. "The immediate aim of the college level formation for the candidate for the priesthood is to help him to mature as a liberally educated human person, committed to Christ and to the service of his neighbor." *(The Program of Priestly Formation)*

Bishop J. Carroll McCormick, then Ordinary of the Scranton Diocese, responding to the aims and objectives of the National Conference of Catholic Bishops, entered an agreement with the University of Scranton and the diocesan-owned seminary for student-candidates to become full-time students at the University of Scranton, while maintaining residence at the Seminary. At the Dalton campus, the seminarian's academic life is complemented by programs of personal and spiritual development. Through a series of supervised ministerial experiences, the seminarian is introduced to the life of the diocesan priest.

This cooperative relationship was established on July 13, 1970. Since then, 150 graduates of the University have been accepted in graduate schools of theology in the United States and Europe. Of that number, some 75 have been ordained for service to the Dioceses of Allentown, Harrisburg, Scranton, and the Archdiocese of Washington; some 74 graduates are currently pursuing master of theology degrees, prior to ordination to the pastoral ministry.

College seminarians matriculate as full-time students in four colleges of the University: College of Arts and Sciences; School of Management; Dexter Hanley College; Graduate School. The programs enable the seminarians to have contact with their peers and with University professors and afford them an opportunity for a wide variety of degree programs.

Current enrollment includes students representing the Dioceses of Camden and Trenton, N.J.; Albany, N.Y.; Charleston, S.C.; Grand Rapids, Mich.; Allentown and Scranton, Pa., and the Archdiocese of Washington.

In 1976, the University established the Saint Pius X Seminary Chair of Theology. Seminary faculty occupy the "teaching" Chair in the department of Theology and extend to both collegians and seminarians the opportunity for courses in theology from the pastoral perspective of diocesan priests.

CURRICULUM

An interdisciplinary curriculum in Christian Tradition is taken by Pius X sophomores, juniors and seniors. Beginning with the 1985-86 year incoming Seminary students, unless excepted by the Seminary faculty, are to major in philosophy.

OUTSIDE THE CLASSROOM

OUTSIDE THE CLASSROOM

As any high school graduate knows, much of a student's education takes place outside the classroom. This is true also at the University level. At the University of Scranton, much of the formal academic learning process takes place off the campus in the various internship programs as well as on the campus in traditional extracurricular activities. In many instances, these activities merit and receive academic credit.

DRAMATICS

The tradition of the theatre and dramatics in Jesuit colleges goes back four hundred years. As evidenced by the recent award of the Pulitzer Prize in Drama to Jason Miller, a 1961 graduate (AB English) of the University, at Scranton this tradition thrives. With increasing frequency, students are writing and staging their own dramatic productions, often for academic credit in English and Communications, or in place of the traditional course term paper.

Beyond these individual efforts, THE UNIVERSITY PLAYERS each year present several dramatic productions. Recent productions of the Players include *Grease, 1776, South Pacific, Pippin, Gaslight, Hot L Baltimore,* John Osborne's *Look Back in Anger,* Peter Schaffer's *Black Comedy,* Tennessee William's *Cat on a Hot Tin Roof,* Ben Johnson's *Alchemist,* Shakespeare's *Taming of the Shrew, Henry V.* and *Tempest,* Moliere's *School for Wives* and Edward Albee's *Who's Afraid of Virginia Woolf.*

During the summer of 1984, the Oscar-winning British actress, Glenda Jackson, was a resident visiting professor. Her acting seminar used a Shakespearean play and a modern American drama as the primary teaching vehicles. Half of her students were from the University of Scranton, the other half from universities across the country.

DEBATE

The tradition of debate in Jesuit colleges and high schools is also strong at the University of Scranton. The Noel Chabanel Council of Debate gives interested students an opportunity to compete in debate and speech events on the intercollegiate level. University of Scranton debaters travel thousands of miles each year nationwide.

ROYAL'S HISTORICAL SOCIETY

Recipient of the Best Club of the Year Award six times (1969-1970, 1972-1973, 1973-1974, 1980-1981, 1981-1982, 1983-1984) in the past sixteen years, this association of students and faculty is devoted to enhancing the study of history outside the classroom. Additionally, the Club sponsors field trips to historical societies, museums, and diplomatic consulates in New York and Washington as well as bringing historians, politicians and diplomats to the University campus. The Royals Historical Society also publishes *Retrospect,* a scholarly journal of student and faculty essays in the historical field.

Jason Miller '61, AB in English, Oscar nominee for his role as Fr. Karras, S.J., in "The Exorcist" winner of the New York Drama Critics' Award, "Tony" Award, and the Pulitzer Prize in Drama for his "That Championship Season".

HUMAN RESOURCES ASSOCIATION

A departmental club organized by the students and faculty of the Human Resources Department, this group won the Club of the Year Award for 1974-75. It sponsors social events such as bowling, dances, picnics as well as a newsletter *HRA Review,* symposia dealing with problems in the professions of helping and volunteer work with several public and private agencies.

HORTICULTURE CLUB

Winner of the 1975-76 Club of the Year Award, this group of biology, chemistry and other interested students among other activities renovated the old Scranton Estate Greenhouse for utilization by the science faculty and students in experiments.

BIOLOGY CLUB

Winner of the Club of the Year Award in 1979-80, this organization is for students with a pre-medical or research interest in biology. A twice-monthly speaker program, tutorial service, volunteer program at local community hospitals, and dinner dances were among the club's activities.

THE UNIVERSITY BANDS

The Bands include a Concert Band, a Jazz Band, and a Pep Band which plays at sports events. The Bands draw their membership from the more than 200 band musicians who attend the University of Scranton. Winner of the Club of the Year Award for 1982-83.

PUBLICATIONS

The University offers a wide choice of journalism opportunities.

The *Aquinas* is the weekly All-American campus newspaper and positions are available to members of all classes.

Esprit is the award-winning campus literary journal.

History students have the opportunity to have their articles published in *Retrospect.*

The yearbook, *Windhover,* is annually produced by the students.

OTHER CLUBS

Business Club
Political Science Club
Ski Club
Pre-Law Society
Social Science Club
Physical Therapy Club
Ice Hockey Club
Computer Science Club
Communications Club
Veteran's Club
India Club
Philosophy Forum
Student Education Association
Students for Life
Psychology Club
Schrodinger Chemical Society
International Students Association
College Democrats
College Republicans
ROTC Rangers
Bowling Club
Tim Merwarth Camera Club
Women's Business Honor Society
Nursing Association
University Singers
Society for Advancement of Management

CLUB OF THE YEAR AWARD

The Club of the Year Award is annually presented to that student organization which most clearly exemplifies the University spirit, through educational and social activities for club members and the University community. Winner of the 1984-85 Award was the Physical Therapy Club.

ATHLETICS

INTERCOLLEGIATE SPORTS

The University is a Division III member of the National Collegiate Athletic Association (NCAA), the Middle Atlantic States Collegiate Athletic Conference (MAC), and the Eastern College Athletic Conference (ECAC).

A complete program of intercollegiate men's and women's sports is directed by the Athletic Department.

MEN'S VARSITY SPORTS	
Basketball	Cross Country
Baseball	Golf
Tennis	Soccer
Wrestling	Hockey

WOMEN'S VARSITY SPORTS	
Field Hockey	Softball
Tennis	Cross Country
Basketball	Soccer
Volleyball	

SOCCER

Each autumn the fall foilage finds a colorful rival in the dramatic exploits of the Royals soccer team, which makes an annual bid for regional and national honors. Scranton, 15-7-1 last year, is the most successful Division III team in the nation with an unequaled four straight NCAA regional championships and four appearances in the national "Final Four" tournament in the last five years.

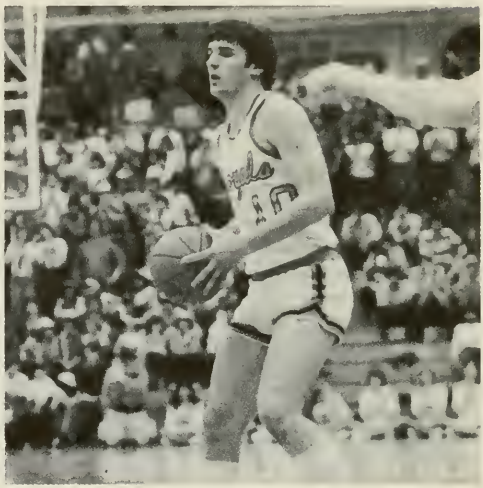
Coach Steve Klingman's remarkable twelve year record is replete with many achievements, but the bottom line is his outstanding won-loss record of 174-61-7. Under his tutelage 36 players have won all-conference honors, 15 have been named to the all-region team, and three have received the nation's highest athletic award of All American.

Dan Diceanu, NCAA All American

MEN'S BASKETBALL

The Royal cagers, 19-11 in 1985, rallied from a midseason low spell to win their sixth straight Middle Atlantic Conference Northern Division Championship and advance into the NCAA Division III playoffs for a record tenth time in eleven years. Senior guard Dan Polacheck won first team Academic All American honors and teammate, senior forward Bill Bessoir closed out his brilliant career with back to back berths on the All American first team.

Scranton won NCAA National Championships in 1976 and 1983.



Dan Polacheck, Academic All American

Deanna Kyle
NCAA All American
1985 "Player of the Year"

Bill Bessoir
NCAA All American
1984, 1985

WOMEN'S BASKETBALL

The dream never did end for the 1985 Lady Royals basketball team, which won its first NCAA Division III national championship by defeating Milliken College and the College of New Rochelle in the "Final Four" tournament held in DePere, Wisconsin. En route Scranton, 31-1 and winners of their sixth conference title in nine years, established a national record 29 game win streak. Senior guard Deanna Kyle was honored as first team All American and as the Division III "Player of the Year." Sixth year coach MIke Strong inflated his career record to 139-39 and was voted "Coach of the Year" honors by his peers.

CROSS COUNTRY

The fast paced strides of the women's and men's cross country teams measured out success in 1984, with the women logging a stunning 11-2 record and a second place finish in the conference tournament and a fourth place in the NCAA Mid-East Regionals. For the first time in Scranton's running history, junior All MAC standouts, Bill Burke and Theresa Meade, carried the team colors in the NCAA national tournament held at Ohio Wesleyan University.

INTRAMURALS AND PHYSICAL EDUCATION

A year-long intramural program is in operation both in the John J. Long Center and outdoors. For the additional sports available in the physical education program, see the description given in the Departmental listing earlier in this bulletin.

STUDENT SERVICES

STUDENT PERSONNEL — THE VICE-PRESIDENT in cooperation with his staff members directs the various student services, plans and coordinates all activities and services in non-instructional areas: e.g., housing, health, activities, food services, placement. THE DEAN OF STUDENTS has a special responsibility for assisting students in the Residence Halls and providing assistance in the area of student conduct.

Fr. Tom Masterson, S.J.
Director of Campus Ministries

CAMPUS MINISTRY — As a Catholic institution the University of Scranton is dedicated to promoting continued growth in personal maturity and freedom, especially as religious believers and persons dedicated to service of the human family. The specifically spiritual ministry of the entire University community is coordinated by the Office of Campus Ministries assisted by the Jesuits, other clergy, University staff members and students themselves.

Frequent daily and Sunday liturgies and other special services are conducted in the chapel and in dormitories in which the community both expresses and deepens its religious vision. Faculty and students join both in the planning and in conducting these worship services. The Sacrament of Reconciliation is celebrated both communally before important festivals and individually before daily Masses, or by request.

Spiritual counseling is available from the staff or Jesuits, especially the DORMITORY COUNSELORS. These make available their training, experience and friendship to promote greater self awareness, maturity, integration and ability to pray, as well as to identify obstacles to these and other goals.

Persons seeking a period of stillness, directed prayer or an experience of Christian community are invited to participate in frequent programs at nearby Chapman Lake. Campus Ministries also sponsors lectures and discussions on vital issues, organizes special events to heighten religious awareness, assists in services to the larger community and is responsible to act as spokesman for justice within the University. Students of non-Catholic faiths are encouraged to help plan an expansion of services to themselves.

COUNSELING CENTER — The Counseling Center serves students in their relationship with all facets of the University community. The Counseling Center is staffed by trained personnel, with over 50 years of combined college counseling experience in areas of vital concern to college-age adults. Counseling services are provided for educational, vocational, personal and spiritual needs. Counseling and testing is performed to meet a wide range of needs. Aptitude for college work, study habits, correct curricular choice, reading techniques and other personal and academic matters of concern should be taken up with Counseling Center Personnel.

The student should ask, "Now that I am in college, where do I want to go and how

CONFERENCE
AND
RETREAT
CENTER

do I want to grow? How can I make the curriculum work to my advantage now, and best prepare me for graduate school or the world of work? How can my choice of Cognate courses and Free Elective courses enhance my education and my preparation for life after college? How do I integrate my personal and family concerns with my academic situation?" The personnel of the Counseling Center can help students answer these questions.

The Counseling Center is located in The Gallery. Professor Cannon, Mr. Beckish, Miss Kopcik, and Fr. Lange, S.J., are readily available to counsel any student with academic or personal questions. The Director and Assistant Director are licensed by the Commonwealth of Pennsylvania to practice clinical psychology. Interviews are on a voluntary basis and may be arranged through the Center's secretary. There is no charge for this service, which is covered by your University fee. The Counseling Center is open both day and evening and would welcome a visit from you.

ALUMNI ASSOCIATION — Typical of a school which is virtually youngest among the Jesuit universities of the world is the coordination of young and old members of the University community in the Alumni Society. Alumni officers speak at various student functions from freshman orientation to commencement ceremonies inducting students into the Society four years later. Together the 20,000 Alumni of the University have raised over $4,000,000 in the Annual Giving Campaign since 1955.

READING CLINIC — To assist students in correcting reading weaknesses and improving proper skills, the University's Reading Clinic under the direction of Prof. John Williams is made available. A non-credit Developmental Reading course is offered. It concentrates on such areas as comprehension, word attack, speed, critical reading and analysis, research and study techniques. There is a $75.00 fee.

OFFICE OF CAREER SERVICES — The office has designed a program of services which is available to all students and alumni. These services are maintained to advise students on career development, to assist in securing employment and to help plan further academic work following graduation. The Career Services Office conducts the corporate employment interview program for seniors, administers the accounting and federal government internship programs, and helps in locating off-campus part-time employment. During the academic year, the office presents workshops on resume/interview preparation and career planning.

Through the Director, Mr. Paul Perhach, and departmental advisors, students are provided with graduate and professional school counseling in the areas of admissions, test deadlines, financial aid, and other pertinent information. Letters or recommendation for students and alumni are typed and sent to graduate and professional schools.

CONCERT AND THEATRE SERIES

The University annually presents a Concert and Theatre Series for the enrichment of the local and college community. Recent presentations have been marked both by the excellence and diversity of the performances: "Tosca," presented by the Goldovsky Grand Opera Theatre of New York; the Philadelphia Chamber Soloists; The Czechoslovakian Pantomime National Theatre of Prague; the National Shakespeare Company of New York; Ars Antiqua de Paris; the Group Motion Media Theatre of West Berlin; the Pennsylvania Ballet; the African Heritage Dancers and Drummers of Washington, D.C., and the Ballet Folklorico of Mexico.

admissions, expenses, financial aid

ADMISSION

The Admissions Committee of the University of Scranton will make the final decision on applications for admission. In reaching this decision, the committee will consider a number of factors:

Demonstrated evidence of a student's academic ability, intellectual curiosity, strength of character and motivation.

Student's high school record, rank in class and extracurricular activities.

Scholastic aptitude test scores and recommendations.

STEPS IN MAKING APPLICATION

Request for an application form and all correspondence dealing with admission to the College of Arts and Sciences or to the School of Management should be directed to:

THE DEAN OF ADMISSIONS
UNIVERSITY OF SCRANTON
SCRANTON, PENNSYLVANIA 18510
Telephone: (717) 961-7540.

A non-refundable fee of $20.00 should accompany the application.

Students should apply during the first semester of their senior year of high school. July 1 is the final date on which applications for Fall term admission will be accepted.

The first two parts of the application form should be completed and the entire form given to the principal or guidance counselor of the high school who will forward high school grades and the completed form to the University.

The Scholastic Aptitude Tests are required of all applicants. These tests should be taken during junior year and/or in November, December or January of senior year. Achievement Tests are not required. Arrange for these tests by contacting your high school guidance counselor or by writing to: The College Entrance Examination Board, Box 592, Princeton, New Jersey 08540.

A non-refundable class reservation fee of $50.00 is required of all accepted applicants. In addition, accepted resident freshmen will make a non-refundable room deposit of $50.00 upon notice from the Dean of Admissions.

The University of Scranton is a Catholic, Jesuit educational institution serving men and women, and is committed to equal opportunity in employment and education for all persons without regard to race, color, creed, ancestry, sex, national origin, handicap, or age.

REQUIRED HIGH SCHOOL PREPARATION

Students desiring to enroll in any of several undergraduate programs offered by the University must have completed a total of 16 or more high school academic units covering grades 9-12. The term "unit" means a high school course taught four or five hours weekly throughout an academic year of 36 weeks duration. Unit requirements and preferred distribution of secondary courses are given in the following table:

HIGH SCHOOL UNITS	COLLEGE PROGRAM CHOICE					
	Arts		Science or Engineering		Business, Education or Social Science	
	Req.	*Pref.*	*Req.*	*Pref.*	*Req.*	*Pref.*
English	4	4	4	4	4	4
History & Social Science	2	3	2	3	2	3
Foreign Language	2	2+	2	2+	2	2+
College Preparatory Mathematics	3	4	3	4	3	4
Science	1	2+	1	3+	1	2+
Other acceptable units	4		4		4	
TOTAL	16+		16+		16+	

Applicants without high school credit in modern languages may be accepted if they present 16 acceptable units. A single year of language in high school will not be counted as a unit to satisfy the requirements for admission.

Mathematics includes elementary, intermediate, and advanced algebra, plane and solid geometry, trigonometry, analysis, and any other college preparatory course. Applicants for science and engineering programs must include trigonometry and must have maintained an 85% average in each mathematics course. Applicants for the nursing program should include chemistry and biology, in their high school program.

Science includes biology, chemistry, physics, and other college preparatory courses. Pre-engineering applicants are urged to include physics in their high school preparation.

Other acceptable high school units may be chosen from any of the following:

Ancient History
Medieval History
Modern History
Civics
Economics
Problems of Democracy
Greek, Latin
Modern Foreign Language
College Preparatory Mathematics
Science
Psychology

REQUIRED OF ALL APPLICANTS

WHAT	APPLY TO WHOM	WHEN
Application Form	Dean of Admissions	End of junior year, start of senior year
High School Record	Principal (to be sent to the Dean of Admissions)	End of junior year, start of senior year
Scholastic Aptitude Test	College Entrance Examination Board, Box 592, Princeton, New Jersey 08540	November, December, or January of senior year

Arrange to have all test scores sent to the Dean of Admissions, University of Scranton.

Advanced Placement
Transfer Students
Academic Development Program
Handicapped Students

ACCELERATION AND ADVANCED PLACEMENT

Applicants who have taken college level courses may be given advanced placement or advanced placement with credit for these courses. Students who have been accepted for admission and desire to apply for such placement must take the Advanced Placement Examination offered in May by the College Entrance Examination Board, Princeton, New Jersey 08540. Ordinarily a score of "3" or better in this examination will insure advanced placement with credit.

COLLEGE LEVEL EXAMINATION PROGRAM

Through the CLEP tests, applicants may gain college credit in most academic subjects for work done outside the classroom in jobs, military service, etc., or in non-accredited institutions. For further information contact: College Level Examination Program, Box 1824, Princeton, New Jersey 08540. Students wishing to be considered for CLEP credits should take the CLEP examinations and have the results forwarded to the Dean of Admissions.

ACADEMIC DEVELOPMENT PROGRAM

Applicants who fail to meet all of the admission requirements may be considered for a special freshman year Academic Development Program. This concentrates on English, logical thinking, reading skills, study habits, as well as work in the student's major field. Satisfactory completion of this program will insure the applicant normal sophomore standing.

TRANSFER STUDENTS

Students, who wish to transfer to the University, must submit an application and the usual credentials (official high school record, SAT scores and transcript(s) from the college(s) attended). At the discretion of the Admissions Committee, students from another accredited college may be admitted provided: (1) The courses to be transferred are equivalent to courses offered at the University of Scranton; (2) the academic average of the candidate is (2.5) "C plus"; (3) certification of honorable dismissal is presented from the previous college. No credit will be given to courses with grades less than "C". Students transferring from other institutions shall be required to make up curricular subjects prescribed in the course which they are to follow at the University of Scranton. A minimum of 52 credits at the University of Scranton is required of transfer students for degree eligibility. Special orientation sessions are held for transfer students. It should be noted that some departments require that at least half of the credits in the student's major be taken here at the University. The respective Dean should be contacted.

HANDICAPPED STUDENTS

The University of Scranton's Handicapped Policy is NOT TO DENY OTHERWISE ACADEMICALLY qualified handicapped persons a college education by virtue of his/her handicap. To this end, the University requires that the handicapped person, *first,* undertake a good faith effort to apply for and obtain funding for the auxiliary aid (s) through state vocational rehabilitation agencies, private associations, through other federal, state, local government sources, and through volunteer funding sources whenever possible. The University will assist the handicapped individual in applying for such funds. *Second,* if these resources are insufficient for an individual, the University will provide essential assistance within available University resources and funds. *Third,* in the latter instance, the University reserves the right to require the handicapped individual to submit medical proof of handicap, or, at the University's expense, to a medical examination, showing need for the auxiliary aid. The Director, Counseling Center maintains and provides handicapped information, coordination, referral and counseling services for handicapped students. Please call the Director, Counseling Center (717-961-7620) or visit his office (the Gallery, 2nd floor front, room 221).

STUDENT EXPENSES

ACADEMIC YEAR 1985-86

TUITION per credit $150.00

ORDINARY FEES

University Fee, per semester 90.00
The University Fee is applied as follows:
Student Center Membership Fee $40.00
Athletic Fee 30.00
Student Activity Fee 15.00
Student Government Activity Fee 5.00
Continuation Fee (in lieu of University Fee for students not in residence), per semester 5.00
Reader (Independent Study) Fee, per credit 30.00
Breakage Fee ..... Actual

FOR SENIORS ONLY
Commencement/Yearbook Fee . $90.00

FRESHMEN TRANSFERS
Orientation Fee 50.00

LABORATORY FEES

Science Depts.
Biology, Physics, CMPS labs, per course, per semester 55.00
Psychology, per course, per semester 40.00
Chemistry, per hour, per semester 25.00
Science Demonstration Fee, per course, per semester 20.00
Medical Technology Internship Fee, per semester 125.00
English/Communications Departments
Film Screening Fee, per course, per semester 35.00
Radio Lab, TV Lab Fee, per course, per semester 30.00
Foreign Language Department
Language Lab Fee, per course, per semester 20.00
Nursing and Physical Therapy Departments
Clinical Lab, per hour, per semester 20.00
Liability Insurance, per year (Psychology, Nursing, Physical Therapy) 12.50
Assessment Fee (Nursing — Jr./Sr.) 20/30

SPECIAL SERVICE FEES

Late Registration Fee 20.00
Requested Change of Schedule after First Day of Classes 15.00
Change of Major Fee 15.00
Certified Transcript (per copy)
Currently Matriculated Students 2.00
All Other Requests 4.00
Application 25.00
Scholarship Application 5.00
Parking Fee, annual 30.00
Locker Rent, per year 4.00
Reading Clinic, per course 100.00

FOR RESIDENT STUDENTS ONLY — ROOM & BOARD

Room Rent (per semester) — Redington Hall	750.00
Room Rent (per semester) — other residences	715.00
Food Program, 19 meal plan (per semester)	650.00
Food Program, 14 meal plan (per semester)	600.00
Food Program, 10 meal plan (per semester)	500.00
Health Service Fee (per semester)	15.00

Incoming resident students are required to pay a $25.00 room damage fee. The room damage fee will be paid only once by each resident student and will be refunded in full (or in part if any claims are made against the fee) upon the student's graduation or official withdrawal from school.

Fees listed for residence facilities do not cover the times of calendar vacations. Students are expected to vacate their rooms at these times.

A resident student participating in an internship or clinical experience during the academic year must pay room fees for the entire year. A student involved in such an internship/clinical experience for an entire semester will not be charged room fees for that semester provided the Student Affairs office is notified in writing of a room cancellation at least one month before the semester in question.

TUITION PAYMENTS

Tuition and fees are payable in advance upon registration. Registration is to be completed BY MAIL in July for the fall semester and in December for the spring semester. Without exception, the Laboratory Fee must be paid in all courses having a laboratory requirement.

No student shall be permitted to receive any degree, certificate, or transcript of record until the financial account with the University has been settled.

FAMILY TUITION REDUCTION

Whenever two or more dependent children from the same family are in attendance during the same semester at the University as full-time undergraduate students, the family tuition reduction policy will apply. Also, whenever at least one dependent child in a family is in attendance at the University as a full-time undergraduate student, the family tuition reduction policy will apply for a parent enrolled in *Dexter Hanley College*. The amount of Tuition Credit that will be awarded each semester for each student will be calculated after other financial aid has been applied by Treasurer's Office personnel. Forms and additional information may be obtained from the Treasurer's Office.

MONTHLY PAYMENTS

The University does not accept installment payments directly, but does facilitate this arrangement through three professional agencies: Academic Management Services, 1110 Central Avenue, Pawtucket, Rhode Island 02861; EFI Fund Management Corporation, 2700 Sanders Road, Prospect Heights, Illinois 60070 — and Tuition Plan Inc., Concord, New Hampshire 03301. Brochures are mailed to parents of all incoming students in May of each year.

VISA and Master Card use is now available for tuition, fee payments. Please contact Treasurer's office for details.

REFUNDS

If a student is authorized to withdraw with honorable standing from the University for a good cause, a written request may be made for reduced charges for tuition, board and room fees. (Note should be taken that the student may not demand a refund as a matter of right.) Ordinary, laboratory, and special service fees are not refundable. Students withdrawing from individual courses are also eligible to receive credit on their account with the University according to the schedule given below.

SCHEDULE OF REFUNDS	CREDIT
FALL/SPRING SEMESTER	
Before the first day of classes and up to and including 9 calendar days after classes begin	100%
To and including 16 calendar days after classes begin	75%
To and including 23 calendar days after classes begin	50%
To and including 31 calendar days after classes begin	25%
Beyond 31 days after classes begin	no refund

HEALTH INSURANCE

The University offers each of its undergraduate students the opportunity to enroll in an attractive health insurance plan at the outset of each academic year. All students residing in University housing units must participate in the University's sponsored health program, unless written evidence is presented showing coverage under another health program (e.g. parent's health policy).

SCHOLARSHIPS AND FINANCIAL AID

The University desires to help as many qualified students as possible to complete a college education. For this purpose the University maintains and Office of Financial Aid and all inquiries concerning such assistance should be made to the Director of Financial Aid.

PROCEDURES FOR APPLYING FOR SCHOLARSHIPS AND FINANCIAL AID

1. Submit the University application for Scholarships and Financial Aid.
2. Complete the Financial Aid Form and forward it to the College Scholarship Service before February 15th. The University code number is 2929. Copies of the Financial Aid Form can be obtained from the Financial Aid Office.

Ordinarily to be eligible for financial aid, a student must be classified as full time, i.e. carrying a minimum of 12 credits per semester. The following financial aid programs are available:

LOANS:

The University administers the National Direct Student Loan Program. The Financial Aid Form is required of all loan applicants.

Most states operate a Guaranteed Student Loan Program in cooperation with lenders (banks, credit unions, savings and loan associations).

Applications must be secured by the borrower from the lender annually. For full-time undergraduate students, an annual maximum of $2,500 is permitted. The overall maximum for undergraduate study is $12,500.

OTHER PROGRAMS:

THE PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY has been designated by the General Assembly to administer the **State Grant Program.** A graduating high school senior may be awarded from $100-$1500 per year. Interested students should consult with their high school guidance counselor for full details and eligibility requirements.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS, formerly Educational Opportunity Grants, established under the Higher Education Act of 1965 are awarded from federal funds through the college; amounts may range from $200-$2,000 per year to students from low income families. The Financial Aid Form is required for this program.

THE PELL GRANT (formerly Basic Opportunity Grant) has been established under Title IV, Part A of the Educational Amendments of 1972. Applications are available from institutions of higher education, high schools, libraries, post offices, and other locations easily accessible to students.

THE COLLEGE WORK-STUDY PROGRAM established under the Economic Opportunity Act of 1964 provides a number of jobs both on and off campus during the summer and academic year for students demonstrating a high degree of financial need. The Financial Aid Form is required of all applicants for this program.

VETERANS READJUSTMENT ACT OF 1966 — Veterans should consult with their local V.A. counselor in order to establish their eligibility for participation.

U.S. ARMY ROTC SCHOLARSHIPS are available. Full details may be secured by contacting the Military Science Department.

THE BUREAU OF VOCATIONAL REHABILITATION under the Pennsylvania Department of Labor and Industry provides help to qualified students. Eligibility requirements should be discussed with a local service office.

CAMPUS EMPLOYMENT — In addition to jobs under the Federal College Work-Study Program, the University annually provides a number of jobs in various departments and administrative offices for qualified students. Students seeking campus employment must file the Financial Aid Form.

SCHOLARSHIPS:

Each year the University offers a variety of scholarships which range from full tuition Presidential Scholarships for outstanding high school seniors to partial scholarships which are granted on the basis of the student's scholastic ability and financial need. The University of Scranton participates in the College Scholarship Service and all applicants for scholarship aid must file a copy of the Financial Aid Form.

SCRANTON PREPARATORY SCHOOL SCHOLARSHIP

This four-year tuition scholarship, initiated in 1947 by the President and Board of Trustees of the University, is given annually to a graduate of the Scranton Preparatory School in honor of the following (the name of the scholarship, therefore, rotates from year to year):

THE MOST REV. MARTIN J. O'CONNOR, D.D., SCHOLARSHIP (1982-1986) — to Leanne Ksiazek.

THE MOST REV. RAYMOND A. LANE, D.D., SCHOLARSHIP (1983-1987) — to Mary Jean Janik.

THE MOST REV. WILLIAM J. HAFEY, D.D., SCHOLARSHIP (1984-1988) — to Aldino L. Pierotti.

THE MOST REV. HENRY T. KLONOWSKI SCHOLARSHIP (1985-1989) — to Elisa M. Sottile.

Selection of the recipient is on the basis of academic achievement, qualities of leadership, service to the Preparatory School, and recommendation of the President and Dean of Studies of the Preparatory School.

PRESIDENTIAL SCHOLARSHIPS

Annually, the University names five *Presidential Scholarships* in honor of distinguished alumni, friends of the University, and citizens of the Scranton area. The scholarships are presented to students with outstanding high school records. The *Presidential Scholarships* have been made possible by University support through unrestricted funds.

The names of the *Presidential Scholarships* and the recipients for 1982-86 are:

THE REV. EDWARD L. COLLINS SCHOLARSHIP — to Maura J. Dooley of South Huntington, New York (Holy Family Diocesan High School).

THE HONORABLE RICHARD P. CONABOY SCHOLARSHIP — to Jennifer M. Gallagher of Hemstead, New York (Sacred Heart Academy).

THE JOHN M. KELLY SCHOLARSHIP — to Jeremy J. Kwiatkowski of Taylor, Pennsylvania (Riverside Jr. Sr. High School).

THE J. FRANK REDDINGTON, M.D. SCHOLARSHIP — to Joanne E. Forler of Warminster, Pennsylvania (Archbishop Wood High School for Girls).

The names of the *Presidential Scholarships* and the recipients for 1983-87 are:

THE REV. WILLIAM J. BYRON, S.J., SCHOLARSHIP — to Suzanne M. Touch of Willingboro, New Jersey (Willingboro High School).

THE JAMES C. DOYLE SCHOLARSHIP — to Monica Stone of Port Jervis, New York (Minisink Valley Central High School).

THE THOMAS A. McGOFF SCHOLARSHIP — to Byron M. Chandler of Wilmington, Delaware (Salesianum School).

THE REV. JOSEPH A. ROCK, S.J., SCHOLARSHIP — to Amy Weigand of Drexel Hill, Pennsylvania (Cardinal O'Hara High School).

THE LEONARD N. WOLF, PhD, SCHOLARSHIP — to Frank R. DePietro of Peckville, Pennsylvania (Scranton Preparatory School).

The names of the *Presidential Scholarships* and the recipients for 1984-88 are:

THE DEAN CHARLES J. BUCKLEY SCHOLARSHIP — to John J. Lepore of Hudson, Pennsylvania (James M. Coughlin High School).

THE ANDREW W. PLONSKY SCHOLARSHIP — to Kevin G. Reinold of Aberdeen, New Jersey (Matawan Regional High School).

THE REV. EDWARD R. POWERS, S.J., SCHOLARSHIP — to Richard W. Roesing of Beach Lake, Pennsylvania (Honesdale High School).

THE MR. AND MRS. JERRY WARSKY SCHOLARSHIP — to Frank I. Klassner of Dickson City, Pennsylvania (Scranton Preparatory School).

THE ROBERT W. WRIGHT, M.D., SCHOLARSHIP — to David J. Caucci of Vestal, New York (Vestal High School).

The names of the *Presidential Scholarships* and the recipients for 1985-89 are:

THE FRANK A. CIMINI SCHOLARSHIP — to William A. Bulman of Hatboro, Pennsylvania (Upper Moreland High School).

THE MONSIGNOR JOHN M. DOUGHERTY SCHOLARSHIP — to Harold F. Jenkins of Nanticoke, Pennsylvania (John S. Fine High School).

THE LOUIS C. KLEFF, S.J., SCHOLARSHIP — to Mark A. Miller of Bensalem, Pennsylvania (Bishop Egan High School).

THE SONDRA G. MYERS SCHOLARSHIP — to Tracey E. Obeda of Old Bethpage, New York (St. Anthony's High School).

THE HONORABLE DANIEL L. PENETAR SCHOLARSHIP — to Janet E. Sensenig of Parkesburg, Pennsylvania (Coatesville Area Senior High School).

PIUS X SEMINARY SCHOLARSHIP

Dr. Arthur Jordan has initiated the Rev. James Flynn '58 Memorial Scholarship for the purpose of assisting University of Scranton students at Pius X Seminary in need of financial aid.

PURPLE CLUB SCHOLARSHIPS

Noteworthy among gifts to University of Scranton students are the significant amounts annually contributed by the Purple Club of Scranton. Since its founding in 1933, Purple Club contributions have totaled over $350,000.

ENDOWMENT

The University Endowment welcomes gifts of funds or property from alumni, parents of students, and other persons interested in the support of higher education.

Generally, the principal of an "endowment" is non-expendable. Income earned by investment of the endowment may be used for scholarships, awards, academic chairs, maintenance of buildings or other purposes specified by donors.

Some endowments are established by bequest through Wills. Charitable Trusts and insurance programs, in more than a dozen variations, also provide a significant source of endowment funds, with the added feature of a life income for the donor. Outright gifts of highly appreciated securities or other property constitute another source of endowment funds.

Those interested in learning more about the cost and tax advantages of establishing a scholarship or other memorial, should contact:

Robert J. Sylvester
Vice President for Development
(717) 961-7661

John J. Burns, S.J.
Director of Deferred Giving
(717) 961-7661

FUNDED SCHOLARSHIPS

BURKE FAMILY SCHOLARSHIPS — In 1966 and 1967, contributions were made to the Scholarship Endowment Fund of the University in the name of the Burke Family Foundation. In prior years, additional unrestricted gifts had been made by the Burke Family Foundation. The income from the fund is used to provide scholarships for needy and deserving students. The Burke family was originally from the Hyde Park section of Scranton. Thomas F. Burke, Class of '09, played a leadership role in founding the scholarship.

REV. HENRY J. BUTLER, S.J., MEMORIAL SCHOLARSHIPS — The first was established in 1984 by James Summers in honor of the Executive Vice President of the University who died in office in 1981. A second Butler Scholarship was established in 1985 by John A. McCrane, a classmate of Father Butler at Georgetown University.

BRIDGET CARNEY SCHOLARSHIP — This Fund was established in 1972 by a bequest of James I. Kearney, M.D. Income from the fund, which is named to honor the memory of Dr. Kearney's mother, is used for scholarships for students, one or both of whose parents were or are parishioners of St. Ignatius Parish, Kingston, Pennsylvania.

JAMES J. CLAUSS SCHOLARSHIP FUND — Established in 1973 by an alumnus, Class of '47, and local businessman, this fund provides investment income to aid students who require financial assistance, but do not qualify for most scholarship programs based on financial need. First consideration is given to Northeastern Pennsylvania students.

JON A. CLAUSS SCHOLARSHIP FUND — A Scholarship Endowment was established in 1980 to honor the memory of Jon A. Clauss, son of Dr. and Mrs. Thomas F. Clauss of Justus, Pa. Income from the endowed scholarship is distributed to deserving young men and women by the University's Financial Aid Office.

ROBERT I. EDELSOHN SCHOLARSHIP FUND — In 1964 a sum was bequeathed in the Estate of Robert I. Edelsohn, a Polish immigrant who became a Scranton businessman and realtor, to be held in trust by the University of Scranton. Income from the fund is used to furnish scholarships for deserving students at the University, who "without such assistance, might not be able to obtain the advantage of a college education."

THE MARTHA FITCH SCHOLARSHIP FUND — In 1955 a bequest was made to the University in the Will of Miss Martha Fitch, a retired nurse and former superintendent of Thompson Hospital, Scranton. Income from this fund is used to provide scholarships for needy and deserving students.

THE SARA G. FRIEL MEMORIAL SCHOLARSHIP FUND — Before her death in 1982, Sara G. Friel, aunt of then University President, William J. Byron, S.J., directed that part of her estate be used to endow a scholarship fund at the University of Scranton. Income from the Fund is distributed to deserving and financially needy students each year by the Director of Financial Aid.

ROSE GRESS SCHOLARSHIP FUND — Mr. and Mrs. Edward Gress in 1982 established this fund through a trust agreement with the University. Income from the trust is applied toward the expenses of a deserving student. First preference for the award is given to students who are residents of the Scranton area.

THE EDWARD T. GRONCKI SCHOLARSHIP — Established to honor the memory of a University of Scranton alumnus, the scholarships are awarded to deserving young men and women selected by the Director of Financial Aid. First consideration is given to residents of the Minooka and Greenwood sections of Northeastern Pennsylvania. The late Attorney Groncki was, at the time of his death, the leading independent specialist in mutual funds and tax shelters in the Washington, D.C. area. His support, during life, of numerous projects to aid young people, led to the creation of the scholarship by family members and close friends.

RUTH GUNSTER MEMORIAL FUND — In 1971, Joseph F. Gunster, Class of '17, established the Ruth H. Gunster Memorial Fund in loving memory of his wife. This fund, which was increased by a bequest in 1980, is invested and the income is used for scholarships given annually to students from Northeastern Pennsylvania.

JUDGE FREDERICK W. GUNSTER SCHOLARSHIPS — The Estate of Joseph F. Gunster also provided funds for this scholarship to honor the memory of his father. Awards are made on the basis of merit.

MARGARET GUNSTER SCHOLARSHIPS — Joseph F. Gunster's mother is remembered through a scholarship fund designed to assist students from low income families. This fund was also established by Mr. Gunster's bequest.

THE JOHN AND LUCILLE GUZEY SCHOLARSHIP — A gift in 1977 by Mr. and Mrs. Guzey, Scranton area philanthropists, made possible a Scholarship Fund, which is being expended in the form of partial scholarships. First consideration is given to those who apply through the West Side Scranton and the Central Scranton Boy's Clubs. Other Boy's Clubs are encouraged to propose candidates when sufficient applications are not produced by the two Scranton clubs. The University Financial Aid Office also awards Guzey Scholarships on the basis of financial need.

Another fund was established in 1978 to perpetuate Guzey scholarships. Income produced by that fund will be used to continue the program after full distribution of the initial gift.

ITT SCHOLARSHIP FUND — The International Telephone and Telegraph Corporation established this scholarship fund to encourage students to pursue academic excellence. The Dean of Admissions annually selects an incoming freshman to receive the award, which is renewable based on academic achievement.

THE JESUIT COMMUNITY SCHOLARSHIP FUND — Substantial annual gifts from the University of Scranton Jesuit Community have made possible an endowment to provide unrestricted scholarship aid to deserving students. Most awards are based on financial need and academic achievement.

THE JETHRO SCHOLARSHIP — Funded with an endowment established by a University of Scranton faculty member, Dr. Everett R. Brown, the grant is awarded to a freshman Management, Marketing or Economics/Finance major who demonstrates that he or she has earned a significant amount of total college expenses. It is not dependent upon financial status of parents, nor high school grades. The grant may be repeated throughout the period of undergraduate study, as long as the recipient maintains a grade point average of 3.00 or better.

THE FRANCIS J. KEARNEY SCHOLARSHIP FUND — A 1977 gift from a retired pharmacist, followed by a bequest in 1979, made possible this Scholarship Fund to assist deserving students in need of financial aid.

KOCH-CONLEY AMERICAN LEGION SCHOLARSHIP — Established in 1985 by agreement with the American Legion, these scholarships are provided on the basis of academic achievement and financial need. First preference for these awards is given to sons, daughters, nieces, nephews and grandchildren of the members of the Koch-Conley American Legion Post 121. Thereafter, similar family members of other Pennsylvania American Legion Post members may be considered.

REV. STEPHEN A. KOLLAR MEMORIAL SCHOLARSHIP FUND — A fund was established in 1977 in accordance with directions set forth in the Will of the late pastor of Holy Family Church, North Washington Ave. at Gibson St., in Scranton. A maximum of $500 per year is made available to each recipient. Applications must be considered in the following priority: 1) Kinship to the deceased, the Rev. Stephen Kollar; 2) members of the Holy Family Parish Congregation of Scranton for a minimum of three years prior to filing the application. In the event that there are no eligible candidates in categories (1) and (2), other needy students may be considered.

THE WILLIAM V. LOUGHRAN AND ALBERT E. PETERS SCHOLARSHIP FUND — Established in 1985 through a gift of Albert E. Peters and Elizabeth Loughran Peters, this fund provides awards, based on merit and need, to seniors who intend to pursue graduate studies in medicine or the physical sciences.

THE ROBERT L. McDEVITT SCHOLARSHIP — Income from a Fund established in 1977 provides scholarship assistance to qualified and deserving Hanley College students. The scholarship was established by Robert L. McDevitt, a Georgetown University classmate and long-time friend of the late Rev. Dexter L. Hanley, S.J., who served as president of the University from 1970 to 1975.

CHARLES E. MERRILL SCHOLARSHIPS — In 1969, the Charles E. Merrill Trust of New York City made a gift to the Scholarship Endowment Fund of the University. The income from this endowment is awarded for scholarship assistance to students of the Catholic faith.

THE ANGELO H. MONTRONE SCHOLARSHIP FUND — This fund was established by Paul M. Montrone, Executive Vice President of Signal Companies and a member of the class of 1962, to honor his father. Each year, the Director of Financial Aid awards a scholarship to a School of Management student who best exemplifies the senior Mr. Montrone's life-long dedication to self-improvement and ethical behavior in business management.

THE MURPHY SCHOLARSHIP FUND — This Fund was established in 1957, through bequest of Miss Margaret Murphy, a retired schoolteacher and lifelong resident of Scranton. A marker has been placed on campus designating the gifts as having been made by Margaret and her sister Katherine "in loving memory of our mother, father and brothers." The income of this fund is used to provide scholarships for needy and deserving students.

THE RAYMOND S. O'CONNELL SCHOLARSHIP — Shortly before his death in late Spring of 1981, an alumnus of St. Thomas College, Raymond S. O'Connell, established a fund for students who otherwise might not be able to attend college. His sister, Sara E. O'Connell, completed the gift after Raymond's death.

THE MARIAN M. AND PATRICK F. O'HARA SCHOLARSHIP — Income from an endowment provides unrestricted scholarship grants to deserving young men and women. Selection of recipients is made by the University Financial Aid Office.

THE FRANCIS E. AND ELIZABETH BRENNAN REDINGTON SCHOLARSHIP FUND — This fund was established in 1984 according to provisions in the will of the late Francis E. Redington. It provides financial assistance to students on the basis of both ability and need. Some portion of the income each year supports scholarships for students from the Republic of Ireland.

ERNEST D. PREATE SCHOLARSHIP FUND — The family of Attorney Ernest D. Preate, Sr. established a scholarship fund in March 1982. Income earned by the Fund is distributed to deserving students. Selection of the student beneficiaries is made by the Director of Financial Aid, in consultation with the Treasurer and Dean of Admissions. First consideration is given to needy students who are residents of Lackawanna County.

JOHN M. ROBINSON SCHOLARSHIP FUND — An initial gift in 1974 and additional yearly gifts have established a fund which is used to generate scholarship income for promising and deserving students. Scranton area residents receive first consideration. Mr. Robinson attended the University and subsequently established a business in Newark, N.J.

THE JOSEPHINE SARCINELLI MEMORIAL SCHOLARSHIP FUND — Med Science Laboratories, Scranton, established this scholarship in 1983 to honor the memory of Josephine Sarcinelli, the office manager of the firm for many years. The annual scholarship is awarded by the Director of Financial Aid to an incoming freshman from Lackawanna County who is in financial need and intends to major in medical technology.

THE AMELIA SURACI SCHOLARSHIP FUND — This endowed scholarship fund was established in 1977 by the late Mr. Frank Suraci, Chairman of Parodi Cigar Corporation, to honor his wife Amelia. After Mr. Suraci's death, contributions from the Suraci and Keating families were added to the endowment. Each year, income from the fund is distributed to deserving and needy students.

THE PAUL L. WALEFF MEMORIAL SCHOLARSHIP — This Fund was established by the parents of Paul L. Waleff, who died in 1984 while a student at the University of Scranton. Each year, the Director of Financial Aid awards the scholarship to a senior or junior who plans a career of service to the handicapped.

ENDOWED CHAIRS

THE ALPERIN CHAIR IN BUSINESS ADMINISTRATION — Established by an endowment, this academic chair was set in place in 1980 through the gifts of three Scranton businessmen: Joel, Irwin and Myer Alperin, and their families.

The late Joel Mitchell Alperin was the originator and the principal sponsor of the chair and its endowment. Income from the Alperin brothers' gift is applied to the salary of a professor in the School of Management.

THE CHAIR IN JUDAIC STUDIES — Income from an endowment established by alumni and friends of the University makes it possible for the University to invite, for short visits to Scranton, Judaic scholars from Israel, or other parts of the world, for public lectures and meetings with students in classroom settings.

THE PIUS X TEACHING CHAIR OF THEOLOGY — Established in 1976 by an anonymous gift, and the assignment of a matching grant from the University's Commitments to Excellence capital campaign, this chair is occupied by a priest of the Diocese of Scranton. The chairholder is nominated by the faculty of St. Pius X Seminary and approved by the faculty of the Department of Theology and Religious Studies at the University.

THE JOSEPH T. AND FRANK M. McDONALD CHAIR — Income from an endowment established by George and Dr. Herbert McDonald is used primarily to support the Pre-Law program, including support of the pre-law advisor, internship program, and advisory team; income is also used to provide scholarship assistance to deserving students in pre-law majors.

OTHER ENDOWMENTS

THE GUNSTER LIBRARY FUND — Established by the 1980 bequest of Joseph F. Gunster, Class of '17, income from this fund provides annual support for Alumni Memorial Library.

JESUIT COMMUNITY CONTRIBUTION — Total contributed services of the members of the Jesuit Community of Scranton have been approximately $3,000,000 since 1942. This gift of funds, returned to the University from payments made to Jesuits for their services, has enabled the University to offer many scholarships from its operating budget and has substantially aided the building program.

JOHN J. LONG, S.J., FUND — Contributions to this fund were made by friends of the Very Rev. John J. Long, S.J., President of the University 1953-1963, on the occasion of his Golden Jubilee in the Society of Jesus and later as a memorial after his death in 1971. The fund is invested and the income therefrom is used for projects and programs concerned with the spritual growth of students.

THE LOYOLA LECTURE — The Jesuit Community serving the University of Scranton has endowed a lecture program intended to bring distinguished Jesuit speakers to campus. Named in honor of St. Ignatius Loyola, founder of the Jesuit Order, this fund can also support visits by other scholars capable of assisting the University community to better appreciate the Jesuit heritage.

FUNDED AWARDS

DR. A.J. CAWLEY AWARD — In memory of Dr. A.J. Cawley of Pittston, Pa., a fund was established by a legacy from his sister, Miss Ellen Cawley. Income therefrom is used to provide an award to a Physics Major each year.

JOSEPH P. HARPER AWARD — A fund was established in 1967 to honor the memory of Joseph P. Harper, Professor of Physics. An annual award is given to a senior Physics major upon the recommendation of the Physics Department and with the approval of the Director of Financial Aid. The Department of Physics presents with the award, a citation reminding the recipient of the high scholarly ideals, exemplary life, and dedicated service represented by Professor Harper.

THE KATHRYN AND BERNARD HYLAND MEMORIAL AWARD FOR EXCELLENCE IN BIOLOGY — A gift from alumnus Bernard V. Hyland, M.D., made in loving memory of his parents, established in 1980 an endowment to perpetuate this annual award. The award is presented to a graduating senior from the Biology Department who, in the opinion of the department's faculty, has achieved distinction based on academic excellence in biology, personal integrity and concern for others.

THE ROSE KELLY AWARD — A University of Scranton alumnus, Joseph Wineburgh, Ph. D., set in place an endowment to link the efforts of elementary and secondary school teachers to the achievements of college students. Each year, an outstanding student is selected by a committee appointed by the Academic Vice President. The Rose I. Kelly Award winner is asked to name a high school or elementary teacher who most influenced his or her pre-college academic preparation. Both the student and the teacher from pre-college days are honored at a campus ceremony. The student also receives a plaque and a book, selected by the student's department chairman. A copy of the same book is placed in the University Library.

Dr. Wineburgh established the program to honor an elementary teacher, Rose I. Kelly, who greatly influenced his life.

ANNUAL SCHOLARSHIPS

UNICO SCHOLARSHIPS — Continuing yearly contributions are made to the University scholarship fund by the Scranton Chapter of UNICO (Unity-Neighborliness-Integrity-Charity-Opportunity), a national service organization. Scholarship help, not to exceed $500 per recipient, is granted yearly to students demonstrating financial need and good academic standing.

LACKAWANNA COUNTY LAWYERS' AUXILIARY SCHOLARSHIP — Established in 1982, this award is annually presented to an outstanding graduating senior from Lackawanna County to provide scholarship assistance in first year of law school.

BIENNIAL SCHOLARSHIP

FRIENDLY SONS OF ST. PATRICK SCHOLARSHIP — Biennially the Society provides funds for a University of Scranton student to enjoy the benefits of an academic experience, usually one or two semesters, in Ireland. The grant is for $1000.

Dr. Richard H. Passon, Provost and Vice President for Academic Affairs.

faculty directory

BOARD OF TRUSTEES

Caroline Bennett
Eugene A. Curtin, M.D.
James C. Doyle
Richard E. Doyle, S.J.
Thomas F. Gleeson, S.J.
Charles G. Gonzalez, S.J.
James J. Haggerty, Esq.
B. Carl Jones
Sr. William Joseph, R.S.M.
Gerard P. Joyce
Arthur J. Kania, Esq.
Herbert T. Keller, S.J.
Robert T. Kelly, C.P.A.
Edward J. Lynett, Jr.
James T. Maier, S.J.
Morey Myers
William B. Neenan, S.J.
Robert E. Nolan
J.A. Panuska, S.J.
Edward Popil
Joseph A. Quinn, Jr., Esq.
Elizabeth B. Redington
Gerard R. Roche
Patrick Samway, S.J.
Lt. Governor William W. Scranton
Joseph A. Sellinger, S.J.
Thomas E. Sheridan
Most Rev. James C. Timlin, D.D.

OFFICERS OF THE UNIVERSITY OF CORPORATION

J. A. Panuska, S.J., President
Marilyn Coar, Scretary
Robert T. Ryder, Treasurer

OFFICERS OF ADMINISTRATION

President of the University (1982)
J. A. Panuska, S.J. (1982)
Professor of Biology (1982)
B.S., Loyola College;
Ph.L., Ph.D., St. Louis University;
S.T.L., Woodstock College

Provost and Vice President for
Academic Affairs (1984)
Richard H. Passon (1984)
Professor of English (1984)
A.B., King's College;
M.A., Ph.D., University of Notre Dame

Vice President for Administrative Services (1983)
John S. Flanagan (1974)
L/Colonel, U.S. Army-Ret.
A.B., College of William and Mary;
M.S., University of Alabama

Vice President for Development (1983)
Robert J. Sylvester (1983)
B.S., University of Scranton;
M.A., Fairfield University

Vice President for Student Affairs (1976)
John R. Gavigan, D. et U.* (1950)
A.B., University of Scranton

Vice President for Finance (1982)/Treasurer (1974)
Robert T. Ryder, D. et U.* (1946)
B.S., M.B.A., University of Scranton

Dean, College of Arts and Sciences (1970)
William J. Parente (1970)
Professor of Political Science (1973)
A.B., Xavier University;
Ph.D., Georgetown University

Dean, Dexter Hanley College (1984)
Catherine McNamee, C.S.J. (1984)
B.S., College of St. Rose;
M.S., Boston College;
Ph.D., University of Madrid

Acting Dean, School of Management (1985)
George V. Babcock, D. et U.* (1963)
Associate Professor of Economics (1974)
A.B., M.A., Ph.L., Boston College;
M.B.A., New York University

Dean, Graduate School and
Director of Research (1985)
Thomas P. Hogan (1985)
Professor of Psychology (1985)
B.A., John Carroll University;
M.A., Ph.D., Fordham University

Dean of Admissions (1981)
Bernard R. McIlhenny, S.J., D. et U.* (1958)
Director of Admissions (1966)
A.B., M.A., Loyola University Chicago;
S.T.B., Woodstock College

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Associate Dean, College
of Arts and Sciences (1983)
John W. Carlson (1983)
Associate Professor of Philosophy (1983)
B.A., St. Mary's College (Calif.);
Ph.D., University of Notre Dame

Dean Emeritus/Assistant to Academic
Vice President (1984)
Charles J. Buckley, D. et U.* (1947)
Associate Professor of Business
Administration (1968)
B.S., University of Scranton;
M.B.A., New York University

Director of Campus Ministries (1976)
Thomas D. Masterson, S.J. (1976)
Assistant Professor of History (1976)
A.B., M.A., Fordham University;
Ph.L., S.T.B., S.T.L., Woodstock College;
M.A., Ph.D., Georgetown University

Executive Assistant to the President —
Planning and Administration (1983)
Glenn Pellino (1980)
B.A., M.A., St. Louis University;
Cand. Ph.D., University of Michigan

Liaison Officer for Intergovernmental
Relations (1983)
Harry B. Strickland, D. et U.* (1963)
Associate Professor of
Business Administration (1968);
B.S., St. Vincent's College;
M.L., Ph.D., University of Pittsburgh

Director of Alumni Memorial Library (1979)
Kenneth J. Oberembt (1979)
B.A., St. John's University;
M.A., University of Illinois;
M.S., Columbia University;
Ph.D., University of Iowa

PROFESSIONAL STAFF AND SERVICES

Ann Clark Bass (1978)
Assistant to Academic Vice President (1979)
B.M., Marywood College;
M.A., Northeast Missouri State University

Cheryl Y. Boga (1982)
University Singers/Band Director (1982)
B.M., Marywood College

Aileen Boyle (1983)
Admissions Counselor (1985)
B.S., University of Scranton

Michele Buchinski (1984)
Small Business Development
Center Business Coordinator (1984)

Arthur J. Bugh (1978)
Foreign Student Advisor (1982)
B.S., United States Military Academy;
M.S., University of Illinois;
M.B.A., University of Scranton

Kenneth S. Buntz (1979)
Sports Information Director (1979)
A.A., Keystone Jr. College
B.A., University of Scranton

Robert J. Burke, D. et U.* (1961)
Director of Personnel Services (1974)
B.S., M.S., University of Scranton

David F. Burns (1984)
Admissions Counselor (1984)
B.S., St. Joseph's University

John J. Burns, S.J. (1976)
Director of Deferred Giving (1979)
B.S., St. Joseph's College;
S.T.B., Woodstock College;
Ph.L., M.A., St. Louis University

Rosemary C. Butler, D. et U.* (1964)
Assistant to Dean,
Dexter Hanley College (1979)
B.S., Marywood College

Joseph M. Cannon, D. et U.* (1959)
Director of the Counseling Center (1968)
Professor of Education (1974)
B.S., University of Scranton;
M.Ed., Pennsylvania State University;
Licensed Psychologist (1973)

Marilyn Coar, D. et U.* (1948)
Executive Assistant to the President (1971)
A.B., Rosemont College

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Lisa Cornell (1983)
Programmer/Analyst (1983)
B.S., University of Scranton

Cynthia Cuffman (1981)
Senior Programmer/Analyst (1981)
B.A., Cedarville College

Stephen A. Dembrosky (1980)
Director of Security/Safety (1981)

Jane W. Derr (1985)
Admissions Counselor (1985)
B.S., University of Scranton

Jerome P. DeSanto (1979)
Systems and Programming Manager (1979)
B.S., M.B.A., University of Scranton

John P. Dessauer (1983)
Director, Center for Book Research (1983)

James Devers
Quality Control — Safety Officer (1985)
Registered Architect

Doris M. Edsell, D. et U.* (1960)
Data Processing Supervisor (1975)

Terry Eggert (1984)
Academic Computing Systems
Programmer (1984)
B.S., University of Pittsburgh

Teresa Fallon (1983)
Theater Technical Director (1983)
B.A., University of Scranton

John Fitzpatrick, S.J. (1958-63; 1965)
Chaplain (1982)
A.B., M.A., S.T.B., Woodstock College;
M.S., University of Scranton

Thomas V. Flanagan (1984)
Lab Technician (1984)
B.S., University of Scranton

James Franceschelli (1982)
Programmer/Analyst (1985)
Associate Degree, Pennsylvania State University

Gloria Gavin (1972)
Nurse (1972)
R.N., Mercy Hospital, Scranton, Pa.
B.A., University of Scranton

William Genello (1984)
Assistant Director, Public Relations (1984)
B.A., St. Bonaventure University

Janet M. Gilroy (1984)
Admissions Counselor,
Dexter Hanley College (1985)
B.S., University of Scranton

Barbara Gleason (1982)
Assistant to Dean,
School of Management (1982)
B.S., University of Scranton

Lucia Granito (1983)
Assistant to Comptroller (1983)
B.S., M.S., University of Scranton

Katherine Guley (1984)
Small Business Development
Center Counselor (1984)

Frank Hamilton (1981)
Small Business Development
Center Counselor (1981)
B.S., University of Delaware

Anne M. Hoskins, D. et U.* (1948)
Assistant to Vice President,
Student Personnel (1979)

Cynthia Hricko (1985)
Programmer/Analyst (1985)
B.S., University of Scranton

Robert Hvezda (1985)
Counselor, Career Services (1985)
B.A., Gannon University

Mary Hyland, D. et U.* (1951)
Assistant Registrar for Graduate
School (1961)

Richard W. Jones (1983)
Director of Public Relations (1983)
B.A., Pennsylvania State University;
M.S., Syracuse University

Kathleen A. Kanavy (1981)
Minister of Liturgical Music/
Associate Campus Minister (1981)
B.M., Marywood College

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

John T. Kelly, S.J. (1985)
Assistant Dean of Admissions (1985)
B.A., Fordham University;
M.A., Fordham University;
M.A., New York University;
M.Div., Woodstock College

Louis C. Kleff, S.J., D. et U.* (1953)
Director of Physical Facilities
and Plant Development (1974)
A.B., M.A., Woodstock College

Kathleen R. Kopcik (1974)
Counselor (1974)
A.B., Marywood College;
M.S., University of Scranton

Martin L. Langan (1974)
Director of Central Services (1975)
B.S., M.B.A., University of Scranton

Roseann Langan (1984)
Programmer/Analyst (1984)
B.S., University of Scranton

John W. Lange, S.J. (1964-66; 1974)
Counselor (1975)
A.B., Bellarmine College;
S.T.B., Woodstock College
M.S., University of Scranton

Zim E Lawhon, D. et U.* (1964)
Colonel, U.S. Army-Ret.
Professor of Military Science (1964)
Registrar (1970)
A.B., M.S., Princeton University

James Loven (1985)
Physics/Electronics Laboratory
Equipment Manager (1985)
B.S., Pennsylvania State University

Lorraine Mancuso (1983)
Programmer/Analyst (1983)
B.S., University of Scranton

James McAndrew (1984)
Programmer/Analyst (1985)
B.S., University of Scranton

Jerome McCormack (1981)
Small Business Development
Center Director (1981)
B.S., University of Scranton

Constance F. McDonnell (1983)
Counselor, Career Services (1983)
B.A., University of Denver;
M.A., Marywood College

John F. McNamara (1975)
Comptroller (1982)
B.S., University of Scranton

Vincent Merkel (1978)
Senior Programmer/Analyst (1978)
B.S., University of Scranton

Lawrence J. Morton (1969)
Dean of Students (1974)
A.B., St. Bonaventure University;
M.S., Syracuse University;
M.S., University of Scranton;
D.Ed., Pennsylvania State University

Alice Murphy, D. et U.* (1958)
Assistant to Dean,
College of Arts and Sciences (1976)

Joseph Murtha (1984)
Director of Physical Plant (1984)

Edward T O'Donnell, S.J. (1985)
Coordinator of Advising,
Dexter Hanley College (1985)
B.A., Fordham University;
M.Div., Regis College;
S.T.L., Toronto School of Theology

Frank Orlando (1976)
Associate Registrar (1984)
B.S., Wilkes College;
M.B.A., University of Scranton

G. Donald Pantle, S.J. (1980)
Associate Campus Minister (1980)
B.A., Bellarmine College;
M.A., Middlebury College

Frank D. Parker (1969)
Assistant Director of
Computer Center (1969)
B.S., University of Scranton

Karen Pennington (1980)
Associate Dean of Students (1980)
B.A., University of Scranton;
M.E., Gannon University

Paul Perhach (1982)
Director of Career Services (1982)
B.A., King's College
M.S., Marywood College

Mary Jane Platou (1982)
Assistant Director for
Media Resources (1984)
B.A., M.A.L.S., University of Denver

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Joseph Preville (1985)
Assistant to the President (1985)
B.A., M.A., University of Detroit;
Ph.D., Boston College

J. Frank Reddington, M.D., D. et U.* (1940)
College Physican (1940)
A.B., Holy Cross College;
M.D., Georgetown University

Kathryn Reedy (1982)
Coordinator of Development
Services and Prospect Research (1984)

John M. Rose (1983)
Administrative Computer Support
Manager (1983)
B.S., King's College

Mirtha M. Rospigliosi (1971)
Assistant Director of Financial Aid (1979)

Warren Rozelle (1984)
Business Counselor,
Small Business Development Center (1984)
B.A., Bloomsburg State College

Marie A. Ryan (1983)
Nursing Learning Laboratory
Director (1983)
B.S., College Misericordia

Thomas A. Santucci (1976)
Electronic Data Processing
Coordinator (1976)

George J. Schemel, S.J. (1985)
Director, Institute of Spirituality (1985)
B.S., University of Scranton;
M.A., Ph.L., Fordham University;
St.L., Woodstock College

Betty J. Scholla, D. et U.* (1959)
Annual Fund Director (1984)

Robert L. Sebo (1983)
Admissions Counselor (1983)
B.A., University of Scranton

Tina Sheaffer (1983)
Resource Coordinator,
Small Business Development Center (1983)
B.S., Pennsylvania State University

Joseph Simmons, S.J. (1984)
Director of Student Commuter
Activities (1984)
A.B., M.A., Loyola University, Chicago

Ronald J. Skutnick (1981)
Systems Programmer (1984)

Albert J. Solomon (1984)
Director of Continuing Education (1984)
B.A., M.A., University of Scranton;
Ph.D., Pennsylvania State University

Paul Strunk (1985)
Assistant Director of Development (1985)
B.A., University of Pittsburgh

Michael Swaintek (1985)
Assistant Director, Annual Fund (1985)
B.A., University of Scranton

Rosemary Sylvester (1976)
Assistant Director,
Personnel Services (1980)

John Tabor (1978)
Senior Programmer/Analyst (1979)
B.S., University of Scranton

Joseph M. Tierney (1981)
Director of Financial Aid (1981)
B.A., University of Scranton

William N. Tome, S.J.
Associate Director of
Campus Ministries (1980);
Adjunct Faculty in Philosophy;
B.A., M.A., St. Louis University;
LL.D., Georgetown University

Diana Moore Trygar (1983)
Associate Chemistry Laboratory Supervisor
B.S., University of Scranton

Richard Trygar (1984)
Assistant Chemistry
Laboratory Supervisor (1984)
B.S., University of Scranton

Gary S. Zampano (1974)
Executive Assistant to the
VP Administrative Services (1985)
B.S., M.B.A., University of Scranton

Robert P. Zelno (1982)
Director of Alumni Relations (1982)
B.S., M.S., University of Scranton

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

FACULTY

PROFESSORS EMERITI

John J. Baldi, M.S.S.W.,
D. et U.* (1948-1981)
Department of Sociology

Umbay H. Burti, LL.D.,
D. et U.* (1935-1980)
Department of Chemistry

Francis J. Gallagher, S.J., M.A., S.T.L.,
(1956-1968)
Department of History

Richard F. Grady, S.J., Ph.D., L.H.D.,
D. et U.* (1942-1970)
Department of English

Walter Haab, Ph.D.
D. et U.* (1960-1980)
Department of Chemistry

William B. Hill, S.J., S.T.L., Ph.D.
(1946-1947, 1969-1983)
Department of English

Daniel J. Houlihan, J.D.
D. et U.* (1947-1985)
School of Management

Helen P. Kelley, M.S.,
D. et U.* (1959-1980)
Assistant Librarian

Antanas Kucas, Ph.D.,
D. et U.* (1947-1967)
Department of Modern Languages

Lawrence J. Lennon, Ph.D.
D. et U.* (1946-1974)
Department of Psychology

Matthew R. O'Rourke, M.A.,
D. et U.* (1955-1982)
Department of English

Andrew W. Plonsky, M.S., E.E.
D. et U.* (1947-1980)
Department of Math/Computer Science

Edward R. Powers, S.J., M.A., S.T.L.
D. et U.* (1955-1985)
Department of Math/Computer Science

Stephen P. Ryan, Ph.D.
D. et U.* (1960-1981)
Department of English

Angelina T. Scardamaglia, M.S.,
D. et U.* (1947-1978)
Assistant Librarian

Thomas G. Sheehan, M.A.,
D. et U.* (1947-1967)
Department of Business Administration

Charles B. Trundle, S.J., M.A., S.T.L.
D. et U.* (1948-51, 1953-1975)
Department of Theology

Leonard N. Wolf, Ph.D., D.Sc.,
D. et U.* (1937-1974)
Department of Biology

PROFESSORS

Neill H. Ackerman (1983)
Associate Professor of Mathematics/
Computer Science (1983)
B.S., Upsala College;
M.S., Ph.D., Lehigh University

David C. Adams (1983)
Associate Professor of Business Administration
B.S., Rochester Institute of Technology;
M.S., SUNY College of Environmental Science
Ph.D., Syracuse University

Barry R. Anderson (1974)
Associate Professor of Biology (1980)
B.S., State University of New York at
Fredonia; M.S., Ph.D., Lehigh University

Panos Apostolidis (1977)
Associate Professor of Business (1977)
B.B.A., University of Athens;
M.B.A., University of Houston;
Ph.D., University of Arkansas

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Martin D. Appleton, D. et U.* (1955)
Professor of Chemistry (1964)
B.S., University of Scranton; M.S., Ph.D.,
The Pennsylvania State University

Mary Ann Bahruth (1980)
Assistant Professor of
Mathematics/Computer Science (1980)
B.A., State University College
at New Paltz;
M.A., State University of New York
at Binghamton

Patricia A. Bailey (1983)
Assistant Professor of Nursing (1983)
B.S.N., Ed.M., Ed.D., Columbia University

Harold W. Baillie (1978)
Assistant Professor of Philosophy (1978)
A.B., Yale University;
M.A., Ph.D., Boston College

Thomas E. Baker (1975)
Assistant Professor of Sociology (1975)
B.S., M.S., Virginia Commonwealth U.;
M.Ed., East Stroudsburg U.;
Cand. Ed.D., West Virginia Univ.

William M. Baker (1985)
Assistant Professor of
Business Administration (1985)
B.S., Pennsylvania State University;
M.B.A., University of Scranton

Galen L. Baril (1975)
Associate Professor of Psychology (1985)
B.A., University of Nevada;
Ph.D., University of Maine

Edward F. Bartley, D. et U.* (1938)
Professor of Mathematics (1968)
A.B., University of Scranton;
M.A., Columbia University

John J. Bartosh (1981)
Major, U.S. Army
Assistant Professor of Military
Science (1981)
B.S., University of Scranton;
M.S., University of Bridgeport;
M.S., Marywood College

Christopher Bauman (1984)
Assistant Professor of Chemistry (1984)
B.S, Oregon State University;
Ph.D., University of Florida

Rebecca S. Beal (1983)
Assistant Professor of English (1983)
A.B., Westmont College;
M.A., University of Chicago;
Ph.D., University of Texas

Thomas N. Beckish (1964)
Assistant Professor of Psychology (1967)
Assistant Director of Counseling
Center (1964)
B.S., M.S., University of Scranton
Licensed Psychologist (1973)

John Begley, S.J. (1985)
Associate Professor of Theology/
Religious Studies (1985)
A.B., M.A., Boston College;
Ph.L., S.T.L., Weston College;
S.T.D., Gregorian University

John A. Beidler, C.D.P., D. et U.* (1964)
Professor of Mathematics/Computer
Science (1976)
Chairperson, Department of Mathematics/
Computer Science (1980; 1983)
A.B., King's College; M.A., Lehigh
University; Ph.D., Pennsylvania
State University

Paul R. Beining, S.J., D. et U.* (1949-51; 1967)
Professor of Biology (1974)
B.S., Ph.L., Spring Hill College;
S.T.L., Woodstock College; M.S., Ph.D.,
The Catholic University of America

J. Brian Benestad (1976)
Associate Professor of Political Theory
and Social Ethics (1983)
A.B., Assumption College;
S.T.L., Gregorian University;
Ph.D., Boston College

Robert M. Bessoir (1968)
Associate Professor of Physical
Education (1973);
Basketball Coach (1972);
B.S., University of Scranton;
M.S., East Stroudsburg State College

Gerald Biberman (1981)
Assistant Professor of Business
Administration (1981)
B.A., M.A., Ph.D., Temple University

Frederic A. Birmelin (1985)
B.S., M.S., University of Scranton
Lecturer in Physics/EE (1985)

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

David W. Black (1984)
Assistant Professor of Philosophy (1984)
B.A., Northern Illinois University;
M.A., Ph.D., Pennsylvania State University

Mrigen Bose (1968)
Associate Professor of Business Administration (1977)
B.S., Patna University; M.A. (Comm.), M.A. (Econ.), University of Calcutta;
M.S., University of Kentucky;
Ph.D., University of Utah

Richard J. Bourcier (1968)
Professor of Foreign Languages (1984)
A.B., Assumption College;
M.A., Laval University;
Ph.D., State University of New York at Binghamton

Everett R. Brown (1975)
Associate Professor of Business Administration (1979)
B.S., M.E., Stevens Institute of Technology;
M.B.A., Ed.D., Temple University;
Registered Professional Engineer in Pennsylvania

James P. Buchanan (1977)
Associate Professor of Psychology (1981)
B.A., The Johns Hopkins University;
M.A., Ph.D., University of California, Los Angeles

Michael C. Cann (1975)
Associate Professor of Chemistry (1978)
B.A., Marist College;
M.S., Ph.D., State University of New York at Stony Brook

J. Timothy Cannon (1981)
Assistant Professor of Psychology (1981)
B.S., University of Scranton;
Ph.D., University of Maine

Edward J. Capestany (1968)
Professor of Philosophy (1974)
B.S., M.A., University of Comillas, Spain;
Ph.D., University of Ottawa

Michael D. Carey (1978)
Associate Professor of Biology (1982)
Chairperson, Department of Biology (1984)
B.A., Wittenberg University;
M.A., Ph.D., Indiana University

Ellen M. Casey (1969)
Professor of English (1981)
B.S., Loyola University, Chicago;
M.A., University of Iowa;
Ph.D., University of Wisconsin

Stephen J. Casey (1969)
Associate Professor of Theology (1981)
A.B., Iona College;
M.A., Marquette University

Leona L. Castor (1983)
Assistant Professor of Nursing (1983)
B.S., College Misericordia;
M.S., University of Pennsylvania
Cand. Ed.D., Pennsylvania State University

Raymond W. Champagne, Jr. (1967)
Professor of History (1981)
A.B., Providence College;
M.S., Duke University;
Ph.D., Loyola University, Chicago

Leonard Champney (1979)
Associate Professor of Political Science (1984)
B.S., University of Texas, El Paso;
Ph.D., Rutgers University

Ying I. Chien (1979)
Associate Professor of Business Administration (1979)
B.S., National Taiwan University;
M.S., University of Manitoba;
Ph.D., University of Kentucky

Ruth Yaron Cicilioni (1982)
Instructor of Math/Computer Science (1982)
B.S., East Stroudsburg State College;
M.S., Villanova University

Frank A. Cimini, D. et U.* (1941)
Professor of Foreign Languages (1972)
A.B. University of Scranton;
M.A., Fordham University

Joseph F. Cimini (1981)
Assistant Professor of Sociology/Criminal Justice (1980)
B.A., University of Scranton;
J.D., Columbus School of Law, Catholic University of America

Orestes P. Coccia, S.J. (1975)
Assistant Professor of Theology (1975)
A.B., Fordham University;
Th.B., Regis College, Toronto;
Ph.D., University of Strasbourg

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

James J. Conlin, S.J. (1967)
Professor of Sociology (1970)
A.B., Ph.L., M.A., Ph.D., St. Louis University;
S.T.L., Woodstock College

Joseph W. Connolly (1983)
Associate Professor of Physics/
Electronics Engineering (1983)
B.S., University of Scranton;
M.S., University of Illinois;
Ph.D., Pennsylvania State University

Willis M. Conover (1978)
Associate Professor of Education (1985)
B.A., B.S., Pennsylvania State University;
M.S., Ed.D., Montana State University

John R. Conway, III (1985)
Associate Professor of Biology (1985)
B.S., Ohio State University;
M.A., Ph.D., University of Colorado

Frank P. Corcione (1978-79, 1982)
Associate Professor of Business
Administration (1982)
B.A., Moravian College;
M.A., Ph.D., Lehigh University

James M. Cosentino (1985)
Assistant Professor of Biology (1985)
B.S., University of Dayton;
M.S., Ohio University;
Ph.D., Utah State University

James J. Cunningham (1968)
Associate Professor of Education (1971)
A.B., King's College; Ed.M., Ed.D.,
Rutgers University; Licensed Psychologist

Francis H. Curtis (1966)**
Associate Professor of Education (1980);
B.S., M.Ed., Pennsylvania State University

Dona R. D'Alesio (1985)
Instructor in Nursing (1985)
B.S.N., College Misericordia;
M.S.N., Villanova University

Thomas W. Decker (1977)
Associate Professor of Human Resources (1982)
B.A., Dickinson College;
M.Ed., University of Virginia;
Ph.D., Ohio State University;
Licensed Psychologist

John R. Deely (1982)
Lt. Colonel, U.S. Army
Professor of Military Science (1982)
B.S., U.S. Military Academy;
M.B.A., Syracuse University

Michael D. DeMichele (1967)
Professor of History (1974); Chairperson,
Department of History/Political
Science (1976; 1979; 1982)
B.S., University of Scranton;
M.A., Ph.D., Pennsylvania State University

Vito DelVecchio (1969)
Professor of Biology (1977)
B.A., University of Scranton;
M.S., St. John's University;
Ph.D., Hahnemann Medical College
Graduate School

Rocco DeRobertis (1984)
Major, U.S. Army
Assistant Professor of Military Science (1984)
B.A., Columbia College

Trudy Dickneider (1984)
Assistant Professor of Chemistry (1984)
B.A., M.A., St. Joseph's College;
Ph.D., University of Miami

Anthony J. DiStefano (1968)
Associate Professor of Physics/
Electronics Engineering (1977)
B.E.E., Brooklyn Polytechnic Institute;
M.A., Columbia University;
Ph.D., Stevens Institute of Technology

David J. Doiron (1985)
Assistant Professor of Physics/Electronics
Engineering (1985)
B.S., Massachusetts Institute of Technology;
M.S., University of New Hampshire;
Ph.D., University of Iowa

Joseph C. Dougherty (1967)
Professor of Political Science (1967)
A.B., St. Charles College;
M.A., Ph.D., Georgetown University

Joseph H. Dreisbach (1978)
Associate Professor of Chemistry (1983)
B.A., LaSalle College;
M.S., Ph.D., Lehigh University

Erick C. Duesing (1978)
Assistant Professor of Business
Administration (1978)
A.B., M.A., University of Missouri;
Ph.D., University of North Carolina, Chapel Hill

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On leave, 1985-1986.

John J. Dunstone (1966)
Professor of Psychology (1974)
B.S., Pennsylvania State University;
M.S., Ph.D., University of Massachusetts

Michael Dutko (1985)
Assistant Professor of Mathematics/
Computer Science (1985)
B.S., Pennsylvania State University;
A.M., University of Michigan;
Ph.D., Pennsylvania State University

John L. Earl, III, D. et U.* (1964)
Professor of History (1972)
B.S., M.A., Villanova University;
Ph.D., Georgetown University

Michael W. Ecker (1984)
Associate Professor of Mathematics/
Computer Science (1984)
B.A., City College of New York;
Ph.D., City University of New York

Gary E. Eichelsdorfer, D. et U.* (1965)
Associate Professor of Mathematics (1979)
A.B., Gannon College;
M.A., University of Detroit

Joseph T. Evans, D. et U.* (1953)
Professor of Biology (1965)
B.S., University of Scranton;
M.S., Ph.D., The Catholic University
of America

Paul F. Fahey, Jr. (1968)
Professor of Physics/
Electronics Engineering (1978)
Chairperson, Department of Physics/EE (1982)
B.S., University of Scranton;
M.S., Ph.D., University of Virginia

Matthew J. Fairbanks, D. et U.* (1960)
Professor of Philosophy (1970)
B.S., M.A., Loyola University, Chicago;
Ph.D., Notre Dame University

Matthew C. Farrell (1967)
Professor of Education (1976)
A.B., M.S., University of Scranton;
Ph.D., Fordham University

John Quentin Feller (1969)
Professor of History (1976)
A.B. Loyola College; M.A., Ph.D.,
The Catholic University of America

Patrick D. Flannery (1981)
Assistant Librarian II (1981)
B.A., University of Scranton;
M.L.S., Syracuse University

Daniel V. Fraustino (1982)
Associate Professor of English (1985)
B.A., SUNY at Buffalo;
M.A., San Diego State University;
Ph.D., State University of New York
at Binghamton

David O. Friedrichs (1977)
Associate Professor of Sociology (1983)
A.B., University College of New York;
M.A., New York University

Joseph A. Fusaro (1974)
Professor of Education (1983)
B.A., Rider College; M.Ed., University
of Vermont; Ed.D., State University
of New York at Albany

William A. Gabello (1983)
Lecturer in Business Administration (1983)
B.S., University of Scranton

Edward Gannon, S.J. (1964), D. et U.*
University Professor (1980)
Professor of Philosophy (1964)
Editor, *Best Sellers* (1975);
A.B., Georgetown University;
M.A., Fordham University;
Ph.L., S.T.L., Woodstock College;
Ph.D., University of Louvain

Rosellen M. Garrett (1980)
Associate Professor of Nursing (1980)
Chairperson, Department of Nursing (1980, 1983)
B.S., College Misericordia;
M.S., University of Maryland;
Ph.D., Medical College of Pennsylvania

Thomas M. Garrett, D. et U.* (1960)
Professor of Philosophy (1970)
A.B., M.A., Ph.L., Gonzaga University;
S.T.L., Weston College;
Ph.D., Gregorian University, Rome

Thomas W. Gerrity (1976)
Assistant Professor of Education (1976)
B.S., University of Pennsylvania;
M.S., University of Scranton;
Ed.D., Columbia University

A. John Giunta, D. et U.* (1960)
Professor of Business Administration (1967)
B.S., Harpur College;
M.S., Ph.D., Syracuse University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Deborah J. Gougeon (1979)
Assistant Professor of Business Administration (1982)
B.S., M.S., University of Scranton;
Ph.D., Walden University

Leonard G. Gougeon (1974)
Professor of English (1982)
B.A., St. Mary's University, Halifax;
M.A., Ph.D., University of Massachusetts

Ralph W. Grambo, Jr. (1973)
Associate Professor of Business Administration (1978)
B.S., University of Scranton;
M.B.A., Ph.D., University of Pennsylvania

Ronald J. Grambo, C.P.A. (1976-77; 1980)
Assistant Professor of Business Administration (1980)
B.S., M.B.A., University of Scranton;
Ph.D., Pennsylvania State University

David W. Hall (1985)
Instructor in Human Resources (1985)
A.B., Lycoming College;
M.S., University of Scranton;
Cand., Ph.D., the Pennsylvania State University

Joseph M. Hamernick, S.J. (1967)
Assistant Professor of Communications (1970)
Chairperson, Department of Communications (1984)
B.S., St. Joseph's College;
S.T.B., Woodstock College;
M.A., The Catholic University of America

Joseph A. Hammond, CPA (1983)
Instructor in Business Administration
B.S., Lehigh University (1965)
M.B.A., University of Scranton (1983)

Michael A. Hardisky (1984)
Assistant Professor of Biology (1984)
B.S., Lebanon Valley College;
M.S., Ph.D., University of Delaware

Patricia Harrington (1984)
Instructor in Nursing (1984)
B.S., Medgar Evers College;
M.S., Hunter-Bellevue School of Nursing

Maurice I. Hart, Jr., D. et U.* (1963)
Professor of Chemistry (1971)
Chairperson, Department of Chemistry (1985)
A.B., Maryknoll College;
M.S., Ph.D., Fordham University

Terry J. Hemminger (1982)
Captain, U.S. Army
Assistant Professor of Military Science (1982)
B.S., East Tennessee State University

Eileen B. Hewitt (1982)
Instructor in Business Administration (1983)
B.S., St. Joseph's College Maine;
M.S., University of Hartford

John M. Hill (1981)
Assistant Professor of English (1981)
B.A., Central College;
M.A., University of Illinois;
M.F.A., University of Iowa;
Cand. Ph.D., University of Illinois

Frank X. J. Homer (1968)
Professor of History (1984)
A.B., University of Scranton;
M.A., Ph.D., University of Virginia

John S. Hopkins (1967)
Assistant Professor of Physical Education (1970)
B.S., East Stroudsburg State College;
M.S., University of Massachusetts

Beth Howlett (1980)
Assistant Professor of Physical Education (1985)
B.S., M.S., SUNY at Cortland
M.S., University of Scranton

Robert F. Hueston (1968)
Associate Professor of History (1976)
A.B., College of the Holy Cross;
M.A., Ph.D., University of Notre Dame

Riaz Hussain (1967)
Associate Professor of Business Administration (1985)
B.S., Forman College, Pakistan;
M.S., University of Panjab, Pakistan;
M.B.A., University of Scranton;
Ph.D., Johns Hopkins University

Paul M. Jackowitz, C.D.P., C.C.P (1977-80; 1982)
Instructor in Math/Computer Science (1982)
B.S., University of Scranton;
M.S., Rensselaer Polytechnic Institute

Edward A. Jarvis, S.J., D. et U.* (1956)
Professor of Philosophy (1974)
A.B., M.A., Ph.L., S.T.L., Woodstock College;
Ph.D., University of Ottawa

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Bernard J. Johns, D. et U.* (1961)
Associate Professor of Mathematics (1979)
A.B., Wilkes College
M.A., Bucknell University

Anne D. Jones (1975)
Assistant Professor of Fine Arts (1981)
B.S., Indiana State College;
M.A., Columbia University

Francis X. Jordan (1966)
Associate Professor of English (1976)
A.B., M.A., University of Scranton;
Ph.D., St. Louis University

John R. Kalafut, D. et U.* (1965)
Professor of Physics/
Electronics Engineering (1974)
B.S., University of Scranton;
M.S., University of Delaware

Prasadarao V. Kakumanu (1978)
Professor of Business
Administration (1984)
B.S., Andhra University;
M.S., Patna University;
M.A., Delhi University;
Ph.D., Cornell University

Thomas A. Kamla (1978)
Associate Professor of Foreign Languages/
Fine Arts (1981)
Chairperson, Department of
Foreign Languages (1981; 1984)
B.A., St. John's University, Minnesota;
M.A., Ph.D., University of Wisconsin

Adelbert Keis (1985)
Visiting Assistant Professor of Biology (1985)
B.A., M.S., Adelphi University;
Ph.D., New York University

Raymond L. Kimble (1973)
Associate Professor of Reading (1973)
Chairperson, Department of Education
(1981, 1983)
B.S., Mansfield State College;
M.S., State University of New York
at Cortland;
Ed.D., Arizona State University

Stephen L. Klingman (1973)
Assistant Professor of Physical Education (1977)
B.S., M.S., Ithaca College

Richard Klonoski (1981)
Assistant Professor of Philosophy (1983)
B.A., University of Scranton;
M.A., Kent State University;
Ph.D., Duquesne University

M. Jane Kopas, O.S.F. (1978)**
Associate Professor of Theology/
Religious Studies (1983)
B.S., M.A., St. Bonaventure University;
Ph.D., Graduate Theological Union

Edmund M. Kosmahl (1983)
Instructor of Physical Therapy (1983)
B.S., M.S., Temple University

Ashok Kumar (1983)
Assistant Professor of Mathematics/
Computer Science (1983)
B.S., Delhi University, India;
M.A., Ball State University;
M.S., Ph.D., Delhi University, India

Mariellen O. Layton
Lecturer in Mathematics
B.S., Chestnut Hill College;
M.A., Villanova University

Raymond G. Laverdiere (1979)**
Assistant Professor of Business
Administration (1979)
B.S., M.B.A., University of Rhode Island;
Ph.D., Pennsylvania State University

Linda Ledford-Miller (1985)
Instructor in Foreign Languages (1985)
B.A., University of California, Irvine;
M.A., Ph.D. Cand., University of Texas at Austin

A. Stanley Lefkowitz (1984)
Lecturer in Business Administration (1984)
B.S., City University of New York;
M.B.A., New York University

John J. Levko, S.J. (1979)**
Associate Professor of Mathematics (1979)
B.A., M.S., Ph.D., Lehigh University;
S.T.B., Gregorian University;
M.A., John XXIII Institute, Maryknoll;
S.E.O.L., Pontifical Oriental
Institute, Rome, Italy

Dennis Linehan, S.J. (1967-69; 1984)
Assistant Professor of Theology/
Religious Studies (1985)
A.B., M.A., St. Louis University;
M.Div., Woodstock College;
Ph.D., University of London

Frank J. MacEntee, S.J., D. et U.* (1965)
Professor of Biology (1973)
B.S., Spring Hill College;
M.S., Ph D., The Catholic University
of America

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On leave, 1985-1986.

Ann Marie Manno, C.P.A. (1984)
Instructor in Accounting
B.S., Marywood College;
M.S., Columbia University Graduate School of Business

Francis Marino (1980)
Assistant Professor of Chemistry (1980)
B.S., M.A., University of Scranton;
M.S., Ph.D., University of Massachusetts

Michael Marino, D. et U.* (1965)
Professor of Education (1970)
B.S., M.S., Brockport State College;
Ed.D., University of Buffalo

Dennis S. Martin (1985)
Associate Professor of
Math/Computer Science (1985)
B.S., Manhattan College;
M.A., University of Rochester;
M.S., Ed.D., SUNY at Buffalo

Gary E. Mattingly (1983)
Assistant Professor of Physical Therapy (1983)
B.S., St. Ambrose College;
Ph.D., St. Louis University

Thomas J. Mayock, Jr. (1983)
Captain, U.S. Army
Assistant Professor of Military Science (1983)
B.S., University of Scranton

John P. McCarthy (1984)
Assistant Professor of Theology/
Religious Studies (1984)
B.A., S.T.M., St. Mary's University;
Ph.D., University of Chicago

Mary T. McCarthy (1984)
Instructor in Nursing (1984)
B.S.N., University of Maryland;
M.S.N., C.S., University of Illinois

Christine E. McDermott (1979)
Assistant Professor of Biology (1979)
B.A., California State at Fresno;
Ph.D., University of Tennessee

John W. McGinley (1970)
Professor of Philosophy (1979)
A.B., College of the Holy Cross;
Ph.D., Boston College

Eugene A. McGinnis, D. et U.* (1948)
Professor of Physics/
Electronics Engineering (1963)
B.S., University of Scranton;
M.S., New York University;
Ph.D., Fordham University

Frank McHale (1983)
Assistant Professor of Accounting (1985)
B.S., University of Scranton;
J.D., Catholic University

John M. McInerney (1966)
Professor of English (1977)
Chairperson, Department of English (1981; 1984)
A.B. LeMoyne College;
M.A., Ph.D., Loyola University, Chicago

Robert L. McKeage (1974)
Assistant Professor of Business
Administration (1978)
B.S., M.B.A., University of Scranton;
M.A., Lehigh University

Ronald H. McKinney, S.J. (1984)
Assistant Professor of Philosophy (1984)
B.A., University of Maryland;
M.Div., Th.M., Weston School of Theology;
M.A., Ph.D., Fordham University

John P. McLean, D. et U.* (1940)
Professor of Business
Administration (1972)
Alperin Chair of Management
(Gift of Joel M., Irwin and Myer Alperin)
B.S., University of Scranton

Marianne McTighe, D. et U.* (1946)
Associate Librarian (1970)
B.S., M.A. in L.S., Marywood College

John E. Megley III (1981)
Professor of Business
Administration (1981)
B.A., University of Illinois;
M.B.A., Roosevelt University;
Ph.D., University of Missouri

John G. Meinke (1976)
Associate Professor of Mathematics/
Computer Science (1983)
B.A., Ed.M., State University of
New York at Buffalo
M.A.T., University of Montana;
M.S., Cand. Ph.D., Illinois Institute of Technology

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.

Louis D. Mitchell, D. et U.* (1961)
Professor of English (1972)
A.B., M.A., Fordham University;
Ph.D., New York University

Patrick Mohr, S.J. (1975)
Associate Professor of Philosophy (1981)
B.A., M.A., Spring Hill College;
Ph.D., Georgetown University

John J. Murray, D. et U.* (1957)
Professor of English (1968)
B.S., University of Scranton;
M.A., The Catholic University of America;
Ph.D., New York University

Georgia L. Narsavage (1984)
Instructor in Nursing (1984)
B.S.N., University of Maryland;
M.S.N., College Misericordia

Jay Nathan (1983)
Associate Professor of
Business Administration (1983)
B.S., M.S., University of Madras;
M.E., University of Florida;
M.B.A., M.A., Ph.D., University of Cincinnati

Marie Koval Nardone (1983)
Assistant Professor of Physical Therapy (1983)
B.S., King's College;
M.S., Duke University

Hong V. Nguyen (1979)
Associate Professor of Business
Administration (1985)
B.S., State University of New York
at Brockport; M.A., Ph.D., State University
of New York at Binghamton

John C. Norcross (1985)
Assistant Professor of Psychology (1985)
B.A., Rutgers University;
M.A., Ph.D., University of Rhode Island

Kevin M. Nordberg (1970)
Associate Professor of Philosophy (1980)
Chairperson, Department of Philosophy (1985)
A.B., Assumption College;
M.A., Ph.D., University of Notre Dame

Kevin R. Norris (1977)
Assistant Librarian II (1981)
B.S., M.L.S., University of Pittsburgh;
M.A., University of Scranton

Mildred A. Norton, D. et U.* (1946)
Associate Librarian (1972)
B.S., M.S. in L.S., Marywood College

John J. O'Malley (1968)
Associate Professor of Psychology (1971)
Chairperson, Department of Psychology
(1978; 1981; 1984)
B.S., University of Scranton;
M.S., Ph.D., Ohio University

William H. Osterle, D. et U.* (1956)
Professor of Theology (1974)
A.B., Loyola University of Chicago;
Ph.L., West Baden College;
M.S. in L.S., Western Reserve University;
S.T.B., Woodstock College;
M.A., University of Notre Dame

Walter A. Pachuk (1984)
Lecturer in Marketing
B.S., University of Connecticut;
M.B.A., University of Scranton

Francis J. Paris (1979)
Major, U.S. Army
Assistant Professor of Military Science (1979)
B.S., University of Scranton

Robert A. Parsons (1979)
Associate Professor of
Foreign Languages (1985)
B.A., M.A., West Virginia University;
M.A., Ohio University;
Ph.D., Pennsylvania State University

Frederick W. Pearce (1982)
Assistant Professor of Communications (1982)
B.A., Iona College;
M.A., Cand. Ph.D., University of Pittsburgh

Georgia P. Pellino (1983)
Instructor of Physical Therapy (1983)
B.S., St. Louis University;
M.S., University of Kentucky

Paul M. Perdew (1985)
Associate Professor of Math/
Computer Science (1985)
B.A., Washington & Jefferson College;
M.A., University of Hawaii;
Ph.D., University of Idaho

Sue R. Perdew (1985)
Associate Professor of Nursing (1985)
B.S.N., Emory University;
M.N.Ed., Ph.D., University of Pittsburgh

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University

Njegos Petrovic (1967)
Professor of Foreign Languages (1974)
A.B., Classical College, Belgrade, Yugoslavia;
M.A., Ph.D., University of Montreal

Peter P. Poole (1966)**
Associate Professor of Business Administration (1976)
B.S., M.B.A., Northeastern University

Alicemarie S. Poyss (1984)
Instructor in Nursing (1984)
B.S., Holy Family College;
M.S., University of Pennsylvania

John B. Pryle (1967-1969; 1972)
Assistant Professor of Sociology (1972)
B.S., University of Scranton;
M.A., Fordham University;
Cand. Ph.D., The Catholic University of America

John J. Quinn, S.J., D. et U.* (1956)
Professor of English (1975)
A.B., College of the Holy Cross;
M.A., Fordham University;
S.T.B., Woodstock College;
Ph.D., University of London

Joseph L. Quinn, S.J. (1979)
Assistant Professor of English (1979)
A.B., Ph.L., A.M., Fordham University;
S.T.B., Woodstock College;
A.M., Ph.D., Harvard University

William V. Rakauskas, D. et U.* (1969)
Professor of English (1979)
B.S., M.A., University of Scranton;
Ed.D., Temple University

Donna D. Ramos (1974)
Assistant Librarian II (1978)
B.A., State University of New York at New Paltz; M.S.L.S., State University of New York at Geneseo

George C. Reavy (1977)**
Associate Professor of Business Administration (1984)
B.A., M.S., Wilkes College;
Ph.D., Lehigh University

Edward J. Rielly (1971)
Assistant Professor (1971)
Chairperson, Department of Sociology/Criminal Justice (1974; 1977; 1980; 1983)
A.B., Cathedral College; M.A., St. John's University; M.Ed., Ed.D., Columbia University

John B. Robertson, Jr. (1969)
Assistant Professor of Physical Education (1969)
B.S., Springfield College;
M.A., Trenton State College

John L. Rogers (1985)
Associate Professor of Fine Arts (1985)
Director, Fine Arts Program (1985)
B.A., Blackburn College;
M.A., M.F.A., Northern Illinois University

Richard W. Rousseau, S.J. (1979)
Professor of Theology/Religious Studies (1979)
Chairperson, Department of Theology/Religious Studies (1981; 1983)
A.B., M.A., Boston College;
S.T.L., Facultes St. Albert de Louvain, Belgium;
S.T.D., St. Paul's University, Ottawa;
Ph.D., University of Ottawa

Midori Y. Rynn (1975)
Associate Professor of Sociology (1982)
B.A., Sophia University;
M.A.L.S., University of Michigan;
M.A., Ph.D., Michigan State University

Thomas F. Sable, S.J. (1985)
Instructor in Theology/Religious Studies (1985)
B.A., Boston College;
M.S., Georgetown University;
M.Div., Jesuit School of Theology;
Cand. Ph.D., Graduate Theological Union

Henry V. Sattler, C.S.S.R. (1967)**
Professor of Theology (1967)
B.A., B.D., Mount St. Alphonsus;
M.A., Ph.D., The Catholic University of America

Elayne C. Scheck (1984)
Lecturer in Nursing (1984)
B.S., M.S., Syracuse University

Rosemary Schmalz, S.P.
Associate Professor of Math/Computer Science (1981)
B.A., Saint Mary-of-the-Woods College;
M.A., University of Illinois;
Ph.D., Florida State University

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Ph.D., University of Wisconsin

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B.S., M.A., Boston College

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Assistant Professor of Chemistry (1981)
B.S., Lafayette College;
M.S., Utah State University;
Ph.D., University of Wyoming

Cheng Hwa Siao (1969)
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LL.B., Soochow University;
M.A., Meiji University;
M.S. in L.S., Villanova University

James R. Sidbury (1983)
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Computer Science (1983)
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M.S., Ph.D., Auburn University

James E. Simon (1981)
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Chairperson, Department of
Physical Therapy (1982)
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Ed.M., Ed.D., SUNY at Buffalo

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M.A., Fordham University;
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B.S., M.S., D.Ed., Pennsylvania State
University
Licensed Psychologist
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Associate Professor of Physical
Education (1982)
B.S., Concord College;
M.S., West Chester State College

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of Human Resources (1974; 1977; 1980; 1983)
B.S., M.S., Ph.D., University of Iowa
Licensed Psychologist
Certified Rehabilitation Counselor

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Associate Professor of Sociology (1981)
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M.A., Fordham University;
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Associate Professor of Computer
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B.S., M.B.A., West Virginia University

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M.S., Fordham University;
Ph.D., University of Massachusetts

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Ph.D. Cand., Pennsylvania State University

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B.S., LaSalle College;
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Professor of Reading (1982)
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B.S., Bloomsburg State College;
M.S., University of Scranton

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Associate Professor of Human Resources (1985)
B.A., Wilkes College;
M.Ed., D.Ed., Pennsylvania State University
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Lecturer in Foreign Languages (1985)
B.A., University of Toledo;
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B.S., University of Scranton;
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Associate Professor of Classics (1979)
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A.B., Ohio Wesleyan University;
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Professor of Business (1971)
B.S., University of Scranton;
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Family Studies
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M.S., University of Scranton
Registered Dietician, ADARD

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Theology
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S.T.B., St. Mary's Seminary;
S.T.L., S.T.D., University
of St. Thomas Aquinas, Rome

Sid Benjamin
Journalism
B.A., Pennsylvania State University
Columnist, Sunday *Times*
Retired editor, Sunday Magazine,
Scranton *Times*

John Bennett
English
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M.A., University of Scranton

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Theology
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B.S., M.A., University of Scranton

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English
A.B., Blackburn College;
M.A., University of Scranton
Doctoral Studies, New York University

Susan Butler
B.A., Stonehill College;
M.A., University of Scranton

Vincent Byrne
Economics/Finance
B.S., University of Scranton
M.S., University of Scranton

Jean Campbell
Communications
A.B., M.A., University of Scranton

Rev. Paul R. Carlson
Theology/Religious Studies
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M.Div., Pittsburgh Theological Seminary;
M.P.A., SUNY-Albany;
S.T.M., New York Theological Seminary;
Ed.D., New York University

Susan Kardos Cirba
Theology/Religious Studies
B.S., University of Scranton
M.A., Marywood College

Charles P. Connor
History
A.B., M.A., University of Scranton;
Ph.D., Fordham University

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Economics/Finance
A.B., St. Peter's College

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Journalism
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M.A., Ohio University

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Journalism
B.S., University of Scranton
Reporter-Columnist,
Scranton *Times*

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Theology
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Ph.D., University of Illinois

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Theology/Religious Studies
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M.A., Christ the King Seminary

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Health/Human Service Administration
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UNIVERSITY OF SCRANTON
SCRANTON, PENNSYLVANIA 18510
717-961-7540
APPLICATION FOR ADMISSION
COLLEGE OF ARTS AND SCIENCES/SCHOOL OF MANAGEMENT

DIRECTIONS: Please complete this application and attach a nonrefundable $20.00 check or money order made payable to the "University of Scranton." Give these to your guidance counselor who will provide an official transcript (including your class rank, SAT or ACT results and senior year courses). Your counselor will mail everything to the address on page 3. Credentials filed in support of your application become the property of the University and are not returnable.

PERSONAL DATA

1.) NAME _____ SOCIAL SECURITY # _____
(Last) (First) (Middle)

2.) HOME ADDRESS _____ PHONE _____
(Number and Street) (area)

_____
(City) (County) (State) (Zip)

3.) DATE OF BIRTH _____ PLACE OF BIRTH _____
(City) (State)

4.) I AM APPLYING FOR THE _____ ☐ FALL ☐ SPRING TERM.
Year

THE FOLLOWING INFORMATION IS APPLICABLE:

☐ COMMUTING STUDENT ☐ FRESHMAN ☐ U.S. CITIZEN ☐ PERMANENT U.S. RESIDENT
☐ DORMITORY STUDENT ☐ TRANSFER ☐ STUDENT—F1
☐ INTEND TO LIVE WITH RELATIVES IN THE SCRANTON AREA. THEIR NAME AND ADDRESS IS:

NAME _____ PHONE _____

ADDRESS _____

EDUCATIONAL DATA

Please list all secondary schools and colleges you have attended (including the University of Scranton). It is your responsibility to see to it that official transcripts from each school and college you have attended are forwarded directly to the Admissions Office.

Secondary School(s) Dates of Attendance Date of Graduation

_____

_____

_____

College(s) Attended Dates of Attendance

_____

_____

PROGRAM OF STUDIES (check one)

N.B. I wish to be considered for the special Scranton/Georgetown University Seven Year Dental Program. ☐

COLLEGE OF ARTS & SCIENCES

- Biochemistry
- Biology*
  - Pre-Dentistry
  - Pre-Medicine
  - Pre-Veterinarian
  - Research
- Biophysics
- Chemistry*
- Chemistry/Business
- Classical Languages*
- Communications*
- Computer Science
- Criminal Justice/ Law Enforcement
- Electronics/Business
- Electronics Engineering
- English*
- Family Studies
- Food Science
- Foreign Languages*
- Gerontology
- Health/Human Services
- Health/Human Services Administration
- History*
- International Studies
- Mathematics*
- Medical Technology
- Nursing
- Philosophy
- Physical Therapy
- Physics*
- Political Science
- Pre-Engineering
- Pre-Law
- Psychology*
- Public Administration
- Secondary Education
- Sociology*
- Theology

SCHOOL OF MANAGEMENT

- Accounting
- Economics/Finance
- Management
- Marketing

N.B. Secondary Education majors must choose a teaching area from any of the above subjects marked with an asterisk (*).

Please indicate your teaching area: _____

MISCELLANEOUS DATA

1) FATHER'S NAME _____ OCCUPATION _____ ☐ living ☐ deceased

2) MOTHER'S NAME _____ OCCUPATION _____ ☐ living ☐ deceased

3) GUARDIAN'S NAME & ADDRESS (IF OTHER THAN PARENT) _____

4) PERSON TO WHOM ALL GRADES AND BILLS SHOULD BE SENT

Name _____ Address _____

5) RELATIVES WHO ATTENDED THE UNIVERSITY OF SCRANTON

Name	Relationship	Dates of Attendance

6) LIST 5 OF YOUR EXTRACURRICULAR AND COMMUNITY ACTIVITIES (EXCLUDING JOBS) IN ORDER OF THEIR IMPORTANCE TO YOU

Activity	Dates of Participation	Time spent per week	Positions held, honors won, etc

7) I HAVE TAKEN OR WILL TAKE THE SCHOLASTIC APTITUDE TEST ON _____ (Date) _____ (Date) _____ (Date)

8) WHAT INTERESTED YOU IN THE UNIVERSITY OF SCRANTON?

☐ ALUMNUS ☐ COST ☐ LOCATION

☐ CATALOG, BROCHURES ☐ CURRICULUM ☐ SCHOOL VISIT BY U. of S. REP.

☐ COLLEGE INFORMATION PROGRAM ☐ HIGH SCHOOL COUNSELOR ☐ STUDENT ENROLLED AT U. of S.

☐ OTHER (Specify)

9) ETHNIC BACKGROUND (Response Voluntary)

Since the Civil Rights Office under Title VI requests the following information from colleges, please check the appropriate blank (this section should be completed by U.S. citizens only)

☐ Alaskan Native ☐ Korean American ☐ Latin American

☐ American Indian ☐ Pacific Islander ☐ Mexican American

☐ Asian American ☐ Vietnamese-American ☐ Puerto Rican

☐ Chinese-American ☐ Black, Non Hispanic ☐ White, Non Hispanic

☐ Filipino-American ☐ Hispanic ☐ Other _____ (Please specify)

☐ Japanese-American ☐ Cuban American

10) PLEASE LIST THE NAME AND SCHOOL TELEPHONE NUMBER OF YOUR GUIDANCE COUNSELOR

Name _____ School Phone Number _____

I CERTIFY THAT THE INFORMATION WHICH I HAVE GIVEN IS TRUE TO THE BEST OF MY KNOWLEDGE. I AGREE THAT IF I AM ACCEPTED, I WILL COMPLY WITH THE RULES OF THE UNIVERSITY WHICH ARE IN EFFECT WHILE I AM A STUDENT.

The University of Scranton is an Affirmative Action/Equal Opportunity Employer and Educator

_____ (APPLICANT'S NATURE)

2

Social Security Number _____

Please supply (the required information in the appropriate space)

1) Applicant's Name _____ (Last) _____ (Middle)

2) Address _____ (Street) _____

_____ (City) _____ (State) _____

_____ (County) _____ (Area) _____ (Phone Number)

3) Grades and bills should be sent to: Name _____

Address _____

4) Date of Birth _____ Sex ☐ Male ☐ Female

5) Father's Name _____ Living ☐ Deceased

Mother's Name _____ Living ☐ Deceased

6) Name of High School _____ CEEB School Code _____

7) Address of High School _____ (Street) _____

_____ (City) _____ (State) _____ (Zip)

8) Year of High School Graduation _____ ☐ Freshman Student ☐ Transfer Student

9) Name of College previously attended _____

Address _____

10) Dormitory Student? ☐ Yes ☐ No

11) Pius X Seminary

UNIVERSITY OF SCRANTON
APPLICATION FOR SCHOLARSHIPS AND FINANCIAL AID

INFORMATION

This financial aid application must be completed by all students who are applying to the College of Arts and Sciences or the School of Management and who wish to be considered for any type of scholarship or financial assistance at the University of Scranton.

The University of Scranton offers various assistance programs. These include:

1) A variety of scholarships and grants from University resources

2) Federally subsidized campus based programs
   a) Supplemental Education Opportunity Grants
   b) College Work Study
   c) National Direct Student Loans

For further information, please consult your University of Scranton catalog under the section on Financial Aid.

PROCEDURES

In order for this application to be evaluated, the following steps must be taken:

1) You must file a FINANCIAL AID FORM (FAF) with the College Scholarship Service, Princeton, N.J., before FEBRUARY 15th. The FAF can be secured at your high school or previous college.

2) You will be expected to apply for the federal Pell Grant and any applicable state grants. Details and application deadlines can be secured at your high school or previous college.

3) Transfer students must provide copies of Financial Aid and Academic Transcripts from ALL previous colleges attended.

PERSONAL DATA

1) Name _____ (Last) _____ (First) _____ (Middle) Social Security _____

2) Home Address _____ (Number and Street) Phone _____ (Area)

_____ (City) _____ (County) _____ (State) _____ (Zip)

3) Date of Birth _____ Place of Birth _____ (City) _____ (State)

4) I am applying for the _____ (Year) ☐ Fall ☐ Spring Term. The following information is applicable:

☐ Commuting Student ☐ Freshman ☐ U.S. Citizen

☐ Dormitory Student ☐ Transfer ☐ Veteran

Intend to live with relatives in the Scranton Area. Their name and address is:

Name _____ Phone _____

Address _____

The University of Scranton is an Affirmative Action/Equal Opportunity Employer and Educator

UNIVERSITY OF SCRANTON — CAMPUS GUIDE JUNE 1, 1985

Facilities

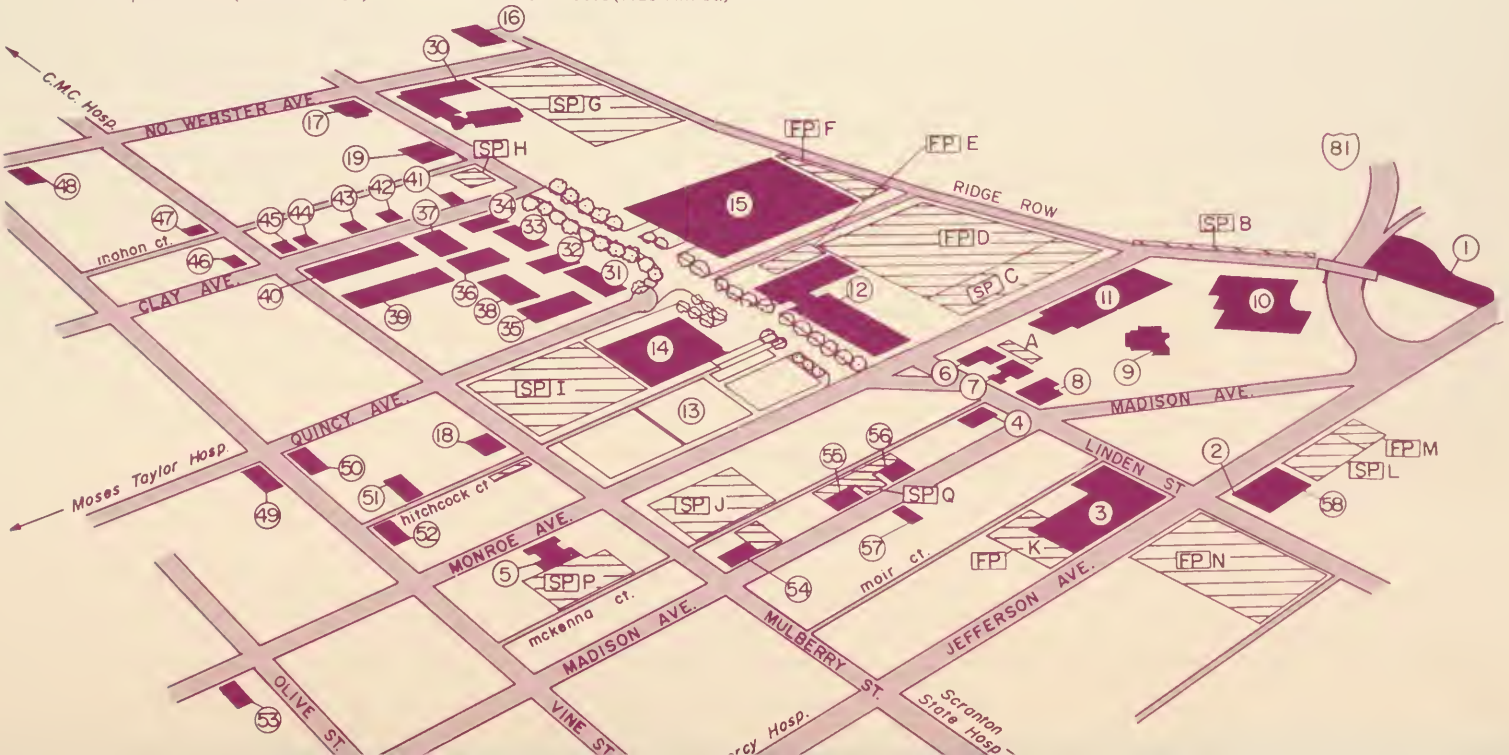
1 — Athletic Field
2 — Jefferson Hall
3 — O'Hara Hall
4 — The Gallery
5 — Rock Hall
6 — Alumni House
7 — Greenhouse
8 — Scranton Hall
9 — Jesuit Residence
10 — Alumni Memorial Library
11 — Loyola Hall of Sciences
12 — St Thomas Hall
13 — Galvin Terrace
14 — Gunster Memorial Student Center
15 — John J Long Center
16 — Maintenance Building (1205 Ridge Row)
17 — Hill House (1131 Linden St)
18 — Claver Hall (915 Mulberry)
19 — Hopkins House (1119 Linden St)

Residences

30 — Redington Hall
31 — Martin Hall
32 — Casey Hall
33 — Lynett Hall
34 — Hannan Hall
35 — Fitch Hall
36 — Dennis Edward Hall
37 — Hafey Hall
38 — McCourt Hall
39 — Nevils Hall
40 — Driscoll Hall
41 — Lancaster House (306 Clay Ave)
42 — Luzerne House (308 Clay Ave)
43 — Gonzaga House (324 Clay Ave)
44 — Blair House (326 Clay Ave)
45 — Westmoreland House (328 Clay Ave)
46 — Fayette House (400 Clay Ave)
47 — Tioga House (1119 Mulberry St)
48 — York House (1128 Vine St.)
49 — Cambria House (501 Quincy Ave)
50 — Montgomery House (447 Quincy Ave)
51 — Mercer House (433 Quincy Ave)
52 — Wayne House (912 Vine St)
53 — Monroe House (615 Monroe Ave)
54 — Wyoming House (802 Mulberry St)
55 — Bradford House (328 Madison Ave)
56 — Somerset House (322 Madison Ave)
57 — Jerrett House (327 Madison)
58 — Jefferson Hall (Linden & Jefferson)

Parking

A — Visitors
B — Library — Student Parking
C — St Thomas — Students
D — St Thomas — Faculty
E — Catlin Court — Faculty
F — Long Center (rear) — Faculty
G — Long Center — Students
H — Mahon Court — Students
I — Student Center — Students
J — Monroe Avenue — Students
K — O'Hara Hall — Faculty
L — Jefferson Hall — Students
M — Jefferson Hall — Faculty
N — Seeley — Faculty
P — Rock Hall — Students
Q — 326 Madison — Students



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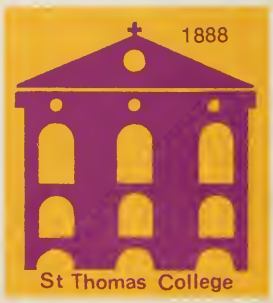
University of Scranton